

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

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IN RE: :

INTEREST RATE SWAPS ANTITRUST LITIGATION :

16-MD-2704 (PAE)

*This Document Relates to Tera Group, Inc., et al. v. Bank
of America Corporation, et al., 16-cv-02858 (PAE)
(S.D.N.Y.) and Javelin Capital Markets, LLC v. Bank of
America Corporation, et al., 16-cv-03542 (PAE)
(S.D.N.Y.)* :

JURY TRIAL DEMANDED

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**JAVELIN AND TERAEXCHANGE
PLAINTIFFS' SECOND CONSOLIDATED AMENDED COMPLAINT**

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Plaintiffs Javelin Capital Markets LLC (“Javelin”) and Tera Group, Inc., Tera Advanced Technologies, LLC, and TeraExchange, LLC (together, “TeraExchange,” and collectively with Javelin, “Plaintiffs”), by and through their undersigned attorneys, allege as follows:

OVERVIEW OF THE ACTION

1. This case concerns a conspiracy among major interest rate swaps (“IRS”) dealers (“Dealer Defendants”) to boycott Plaintiffs in order to undermine increased competition in the IRS market and thereby maintain the Dealer Defendants’ massive profits.¹ By boycotting and thus destroying Plaintiffs’ trading platforms, all Defendants have succeeded in blocking IRS customers, such as pension funds and municipalities, from enjoying the benefits of greater price transparency and competition. Defendants used a variety of mechanisms, including blocking anonymous trading, to promote their conspiracy and ensure that only the Dealer Defendants had access to competitive and transparent IRS pricing.

2. An IRS is a type of financial derivative. It is an agreement between two parties to trade interest-rate cash flows on a specific amount of money for a fixed period of time. In the most common type of swap — often referred to as a “plain vanilla” swap — one counterparty pays the other a *fixed* interest rate in exchange for receiving a *floating* interest rate. The floating rate is often tied to an industry benchmark (or “reference rate”), such as the LIBOR. The counterparty paying a fixed rate is typically referred to as the “buyer,” and the counterparty making payments at the floating rate is known as the “seller.” The value of the contract to each side moves (in opposite directions) depending on changes in interest rates.

¹ As more fully defined below, the Dealer Defendants are Bank of America, Barclays, BNPP, Citi, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JP Morgan, Morgan Stanley, RBS, and UBS.

3. IRS are an important financial tool used by an array of investors to manage risk and protect themselves against fluctuating interest rates. For example, a municipality that issued a floating-rate bond to pay for a clean-water project might later use an IRS to convert floating-rate payments on the bond into fixed payments in order to hedge against interest-rate increases. IRS comprise one of the largest financial markets, with billions of dollars in swaps (in notional value) traded each day. Non-dealers seeking to trade IRS (“buy-side customers”) have historically been limited to a dark and inefficient over-the-counter (“OTC”) market where they must individually contact one or more of the Dealer Defendants for price quotes.

4. Plain vanilla IRS have long been viable candidates for electronic trading because of their standardized structure and high level of transaction frequency. Specifically, they have been viable candidates for electronic trading protocols that can facilitate an “all-to-all” environment, which would allow buy-side customers to trade IRS with a larger community of market participants, including non-traditional liquidity providers and other buy-side customers. On platforms that offer all-to-all trading protocols, a buy-side customer can trade with *any* qualified trading partner and is not artificially limited to trading with just the Dealer Defendants that have historically acted as dealers. “All-to-all” trading yields greater price competition because it increases the number of potential counterparties with whom buy-side customers can trade. The increase in price competition saves these buy-side customers money by lowering their transaction costs.

5. Yet, despite the buy-side’s demand for more efficient and competitive electronic trading of IRS, and despite Plaintiffs’ substantial investments to provide all-to-all trading platforms to the buy-side, investors today remain stuck in an inefficient and antiquated market environment that forces them to trade IRS exclusively through the Dealer Defendants. This state

of affairs is the result of a carefully planned and well-orchestrated conspiracy, among the Dealer Defendants, to boycott and destroy the trading platforms developed by Plaintiffs that sought to provide all-to-all trading protocols to the buy-side.

6. The Dealer Defendants conspired because they “want desperately to preserve the status quo” in order to protect the tremendous information advantage they enjoy in the market, which enables them to make extraordinary profits.² As noted, the Dealer Defendants have historically acted as the primary market makers in the OTC market for IRS, meaning one of them was typically on one side of every IRS trade. In this OTC market, trading was typically conducted over the telephone by “voice.”

7. The voice-based, OTC market for IRS conferred tremendous advantages on the dealers at the expense of buy-side customers. Voice-based, OTC trading in IRS forced the buy-side to rely exclusively on dealers for price information because there was little or no price visibility available elsewhere. In order to obtain an actionable price quote, the buy-side customer had to contact one of the dealers and disclose its identity, the intended direction of the trade (pay fixed or receive fixed), and the desired notional amount — critically important information that the dealer could use to its own advantage.

8. Executing an IRS trade in the voice-based, OTC market was also very restrictive. To complete a transaction, the dealers required buy-side customers to execute trades “on the wire,” meaning that executable prices were only available when the buy-side customer was directly engaged with the respective dealer over the phone. As a result, buy-side customers were severely limited in their ability to force multiple dealers to compete directly on price. In short,

² Charles Levinson, *Startup Challenges Dominance of Big Banks in Derivatives Markets*, REUTERS (Mar. 10, 2015), <http://www.reuters.com/article/2015/03/10/markets-derivatives-exchange-insight-gra-idUSL1N0WB2D520150310>.

the voice-based, OTC market for IRS was an opaque form of trading that did not provide an efficient means of competitive price shopping by buy-side customers and denied those customers access to actionable, real-time price information. The deck was stacked in favor of the dealers and against their customers.

9. As a result, the voice-based OTC market allowed the Dealer Defendants to generate tremendous profits. For every IRS, a Dealer Defendant has a “bid” price, at which it will purchase the IRS, and an “ask” price, at which it will sell the IRS. When the dealer purchases an IRS at a lower bid price, and then sells an IRS with the same terms at a higher ask price, the dealer realizes a profit on the difference between the prices, known as the “spread.” In the dealer-to-customer OTC market, these bid/ask spreads are grossly inflated, allowing the dealers to earn huge profits.

10. But financial markets develop and evolve — or at least they are supposed to. By the 1990s, technological advances were bringing electronic trading to a variety of financial markets. Electronic trading in fixed income securities was introduced in the mid-1990s and began gathering momentum in the IRS market in the early 2000s.

11. The evolution of the IRS market to electronic trading should have displaced the archaic and inefficient protocols of the voice-based trading regime. Recognizing as much, Congress sought to bring more price transparency and competition to the markets for IRS and other derivatives with the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (“Dodd-Frank”). Dodd-Frank mandates, for example, that standard IRS move to exchanges or swap execution facilities (“SEFs”), which were envisioned as electronic trading platforms that would allow trading on an all-to-all limit order book.³ Rules issued pursuant to Dodd-Frank were

³ An “all-to-all limit order book” is a system in which participants submit bids and offers that are then automatically matched in order to facilitate efficient trading.

intended to make the derivatives markets – which were assailed following the financial crisis – safer, more transparent, and more competitive.

12. Javelin and TeraExchange were founded in 2009 and 2010, respectively, by separate groups of derivative trading and technology professionals to develop the anonymous all-to-all trading platforms demanded by buy-side customers. Javelin and TeraExchange each spent millions of dollars and invested years of effort to develop and implement their electronic all-to-all trading platforms. Javelin and TeraExchange also developed their own live credit check systems and connected to third party credit hubs to facilitate central clearing of trades. Central clearing simplifies all-to-all trading by eliminating the risk a swap counterparty will default on its obligations.

13. What Javelin's and TeraExchange's founders did not realize was that the reason no anonymous all-to-all trading platforms existed was because the Dealer Defendants had conspired to boycott entities offering modern, all-to-all trading to buy-side customers.

14. The Dealer Defendants conspired for one simple reason: to continue to enjoy an extraordinary profit center. By blocking the entry of Javelin, TeraExchange, and other similar all-to-all trading platforms into the IRS market, the Dealer Defendants force the buy-side to trade with them in an opaque OTC market and thereby extract billions of dollars in monopoly rents, year after year.

15. Absent collusion, the lack of transparency and limited price competition that pervades the IRS market would have disappeared long ago. Because of the benefits of transparency, competitive pricing, and immediacy, markets for financial products historically have moved to all-to-all trading platforms soon after the products become sufficiently standardized and liquid. Because of its maturity, size, and high-level of standardization, the IRS

market has long been primed for such all-to-all trading. Faced with a variety of threats of evolution to this modern form of trading, the Dealer Defendants banded together via a horizontal conspiracy, joined by co-conspirators ICAP Capital Markets LLC (“ICAP”) and Tradeweb Markets LLC (“Tradeweb”), to protect the highly-profitable market structure that they dominated.

16. In particular, the Dealer Defendants engaged in a group boycott aimed at shutting down Javelin, TeraExchange, and other trading platforms that would allow the buy-side to trade on an all-to-all order book. The Dealer Defendants’ efforts to squash Plaintiffs have taken several forms, including refusing to deal with Plaintiffs, using clearing affiliates to refuse clearance of trades executed on Javelin and TeraExchange, and confronting customers who used or considered using Javelin or TeraExchange with loss of business or services, or increased fees with the Dealer Defendants.

17. The Dealer Defendants themselves trade IRS *among each other* on efficient, electronic platforms operated by entities known as interdealer brokers (“IDBs”). These platforms allow the Dealer Defendants to access transparent and better pricing for themselves while responding to buy-side requests to trade.

18. Under collective pressure from the Dealer Defendants, IDBs allow only *dealer-to-dealer* transactions. If an IDB were to allow buy-side customers access to its platform, the bifurcation of the market desired by the Dealer Defendants would have collapsed long ago. The Dealer Defendants therefore make sure that any IDB that dares to consider opening its platform to the buy-side is put in the “penalty box” and blackballed. Defendant ICAP, the leading IDB for IRS, has agreed with the Dealer Defendants to not open its interdealer platforms to the buy-side

in exchange for the dealers' promise of continued liquidity and the primary market share in the interdealer market.

19. The Dealer Defendants police the threat posed by IDB trading platforms through a practice known as "name give-up." Name give-up requires disclosure of the identity of each swap counterparty to the other on every trade. The Dealer Defendants impose this practice on IDBs for the sole purpose of enabling the dealers to ensure that no buy-side customer trades IRS on the IDBs' efficient, electronic platforms. Any SEF that does not implement name give-up, such as Javelin or TeraExchange, is hung out to dry by the Dealer Defendants' cartel.

20. Thus, even as they enjoy the benefits of exchange trading among themselves, the Dealer Defendants deny those benefits to their buy-side customers. Buy-side customers have been effectively "shut out" of this "paradise of infinite liquidity and tight pricing."⁴

21. As a result of the Defendants' collusion, Javelin and TeraExchange today effectively facilitate no IRS trading despite years of development and millions of dollars in investment capital. Absent the Dealer Defendants' group boycott, IRS market participants would trade on Javelin's and TeraExchange's platforms. The boycott of Javelin, TeraExchange, and other anonymous all-to-all trading platforms fits a pattern of collusion among the Dealer Defendants and others designed to manipulate various aspects of the financial system, including the market for credit default swaps ("CDS") and interest-rate derivatives.

22. The Defendants' collusion is responsible for the irrational persistence of antiquated trading practices that deprive the IRS market of the cost savings and transparency associated with all-to-all trading. The only SEFs — including Tradeweb's — that today have any meaningful buy-side customer trading activity in effect require platform participants to trade

⁴ Joe Rennison, *Meet the new OTC market-makers*, RISK (Feb. 27, 2014), <http://www.risk.net/risk-magazine/feature/2331122/meet-the-new-otc-market-makers>.

directly with a Dealer Defendant through a trading method whereby the customer places a “request for quote” (“RFQ”) with one or more dealers. This RFQ method prevents the market from experiencing the true benefits of all-to-all trading and is the functional equivalent of transacting on the voice-based OTC market.

23. Defendant Tradeweb acts as the primary forum for Defendants’ collusion. In late 2007, the Dealer Defendants began to be concerned about plans by Tradeweb, which was then owned by Thomson Corporation, to introduce more competition to the IRS market, in the form of an all-to-all trading platform. To respond to this threat from Tradeweb, and other entities planning similar initiatives, Goldman Sachs championed a “consortium” strategy. As part of this strategy, Goldman Sachs proposed to work together with other primary dealers in the IRS market (*i.e.*, Goldman Sachs’ competitors) to neutralize Tradeweb by jointly investing in the company, taking over its Board of Directors and key committees, and stopping it from moving forward with its plans for an all-to-all trading platform. Goldman Sachs also realized that the Dealer Defendants could use Tradeweb as a vehicle to coordinate their conduct and control of the IRS market going forward.

24. And that is exactly what the Dealer Defendants did. As part of a coordinated effort they named “Project Fusion,” the Dealer Defendants (Credit Suisse, Deutsche Bank, Goldman Sachs, JP Morgan, Morgan Stanley, RBS, and UBS, later joined by Citigroup, Bank of America and then Barclays) jointly took control of Tradeweb. After doing so, they made sure Tradeweb would not convert its platform to an anonymous order book for the trading of IRS. They also agreed to commit liquidity to Tradeweb and to withhold support from other trading platforms that threatened their privileged position in the market. Against its own economic self-interest, Tradeweb agreed with the Dealer Defendants to shutter the possibility of offering

competitive all-to-all IRS trading, and to forego the lucrative brokerage fees that would come from facilitating such transactions.

25. The Dealer Defendants installed themselves on Tradeweb’s Board of Directors and a variety of “committees” that meet to discuss the IRS market, secretly, under the cover of a supposedly legitimate and independent enterprise. Since at least 2008, key strategic personnel from the Dealer Defendants — many identified by name and position below — have used the auspices of Tradeweb to coordinate their conduct to ensure the IRS market does not develop in ways that threaten their collective dominance.

26. As a result of the Dealer Defendants’ collusion, the IRS market has not developed in the manner that financial markets typically do. The Dealer Defendants have instead collectively kept it frozen in time for their own selfish purposes.

27. Yet, because Defendants’ conspiracy to maintain a bifurcated market is not expressly prohibited by Dodd-Frank, the Commodity Futures Trading Commission (“CFTC”), the Dodd Frank Act’s primary regulator with respect to the swaps market, is unable to address the anticompetitive harms described herein. Defendants’ conspiracy is, however, prohibited by the Sherman Act, whose crucial role in putting a stop to collusive conduct by competitors Congress carefully and expressly preserved.⁵

28. Indeed, the need for the enforcement of the antitrust laws in this case is especially strong, given that Defendants’ continue to take steps to shield their ongoing conspiracy. In October 2016, Bloomberg reported that in late May 2016 a “secret society” of the

⁵ See 12 U.S.C. § 5303 (2010) (“Nothing in this Act, or any amendment made by this Act, shall be construed to modify, impair, or supersede the operation of any of the antitrust laws, unless otherwise specified.”). See also 156 CONG. REC. E1347-01 (2010), 2010 WL 2788137 (statement of Rep. John Conyers, Jr.) (“The final bill contains a number of provisions to ensure that the antitrust laws remain fully in effect.”).

“top in-house lawyers for some of the world’s most powerful banks” met at a hotel near Versailles to discuss the terms on which they would settle this and other financial antitrust litigation.⁶ Two attendees disclosed that, among other things, the banks’ lawyers discussed that no bank should settle any such lawsuit until at least 60 days after the filing of a defense motion to dismiss. Bloomberg also reported that the Chief Legal Officer of Morgan Stanley “implored his confederates to hang together and resist the temptation to settle quickly.”

PARTIES

A. Plaintiffs

29. Plaintiff Javelin Capital Markets, LLC is a Delaware limited liability company with its principal place of business in New York, New York. Javelin Capital Markets, LLC was the parent of Javelin SEF, LLC, a Delaware limited liability company with its principal place of business in New York, New York. Javelin SEF, LLC has been granted permanent registration as a SEF by the CFTC, has conducted swap execution activities, and was previously a plaintiff in this action. On November 1, 2016, Javelin SEF, LLC was acquired by a subsidiary of Bats Global Markets, Inc. In connection with that transaction, Javelin SEF, LLC assigned to Javelin Capital Markets, LLC all of its rights, title, and interest in and to the claims and causes of action in this action.

30. Plaintiff Tera Group, Inc. is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Summit, New Jersey.

31. Plaintiff TeraExchange, LLC is a Delaware limited liability company with its principal place of business in New York, New York. TeraExchange, LLC conducts swap

⁶ Greg Farrell & Keri Geiger, *Inside the Secret Society of Wall Street’s Top In-House Lawyers*, BLOOMBERG (Oct. 14, 2016), <https://www.bloomberg.com/news/articles/2016-10-14/what-top-bank-lawyers-were-doing-at-secret-versailles-summit>.

execution activities, and has been granted permanent registration as a SEF by the CFTC.

TeraExchange, LLC is a wholly owned subsidiary of Tera Group, Inc.

32. Plaintiff Tera Advanced Technologies is a Delaware limited liability company with its principal place of business in Summit, New Jersey. Tera Advanced Technologies creates and provides to TeraExchange, LLC technology utilized to operate its SEF. Tera Advanced Technologies is a wholly owned subsidiary of Tera Group, Inc.

B. Defendants

33. Whenever reference is made to any act, deed, or transaction of any entity, the allegation means that the corporation engaged in the act, deed, or transaction by or through its subsidiaries, affiliates, officers, directors, agents, employees, or representatives while they were actively engaged in the management, direction, control, or transaction of the entity's business or affairs.

34. Defendant Bank of America Corporation ("BAC") is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Charlotte, North Carolina. BAC was a shareholder in Tradeweb during the relevant period and was part of the conspiracy against Plaintiffs. Defendant Bank of America, N.A. ("BANA") is a federally chartered national banking association with its principal place of business in Charlotte, North Carolina, and branch locations in New York, New York. BANA is registered as a swap dealer with the CFTC, and, during the relevant period, it entered into IRS contracts with the buy-side in the United States. As part of the conspiracy, BANA agreed with the other Defendants to, and did, boycott the Plaintiffs' platforms, located in New York. Defendant Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPFS") is a corporation organized and existing under the laws of the State of Delaware with its principal place of business in New York, New York. MLPFS is a wholly owned subsidiary of BAC. In addition, MLPFS is registered as a broker-dealer with the

U.S. Securities and Exchange Commission (“SEC”), and as a Futures Commission Merchant with the CFTC, and refused to clear trades on Plaintiffs’ platforms as part of the conspiracy.

35. As used herein, the term “Bank of America” includes Defendants BAC, BANA, MLPFS, and their subsidiaries and affiliates, including Merrill Lynch & Co. and Merrill Lynch Bank USA, that participated in the IRS market.

36. Defendant Barclays Bank PLC is a corporation organized and existing under the laws of England and Wales, with its principal place of business in London, England and branch locations in New York, New York. Barclays Bank PLC was a shareholder in Tradeweb during the relevant period and was part of the conspiracy against Plaintiffs. Barclays Bank PLC is registered as a swap dealer with the CFTC, and, during the relevant period, it entered into IRS contracts with the buy-side in the United States. As part of the conspiracy, Barclays Bank PLC agreed with the other Defendants to, and did, boycott the Plaintiffs’ platforms, located in New York. Defendant Barclays Capital Inc. is a corporation organized and existing under the laws of the State of Connecticut, with its principal place of business in New York, New York, and is a wholly owned subsidiary of Barclays Group US Inc., which in turn is a wholly owned subsidiary of Barclays Bank PLC. In addition, Barclays Capital Inc. is registered as a broker-dealer with the SEC, and as an FCM with the CFTC, and refused to clear trades on Plaintiffs’ platforms as part of the conspiracy.

37. As used herein, the term “Barclays” includes Defendants Barclays Bank PLC, Barclays Capital Inc., and their subsidiaries and affiliates that participated in the IRS market. Barclays Bank PLC maintains a New York branch.

38. Defendant BNP Paribas, S.A. (“BNPP SA”) is a corporation organized and existing under the laws of France, with its principal place of business in Paris, France and branch

locations in the United States, including its New York, New York branch. BNPP SA is registered as a swap dealer with the CFTC, and, during the relevant period, it entered into IRS contracts with the buy-side in the United States. As part of the conspiracy, BNPP SA agreed with the other Defendants to, and did, boycott the Plaintiffs' platforms, located in New York. Defendant BNP Paribas Securities Corp. ("BNPP Securities") is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. In addition, BNPP Securities is registered as a broker-dealer with the SEC, and as an FCM with the CFTC, and refused to clear trades on Plaintiffs' platforms as part of the conspiracy.

39. As used herein, the term "BNPP" includes Defendants BNPP SA, BNPP Securities, and their subsidiaries and affiliates that participated in the IRS market. BNPP transacts business in New York, New York.

40. Defendant Citigroup, Inc. ("Citigroup") is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. Citigroup was a shareholder of Tradeweb during the relevant period and was part of the conspiracy against Plaintiffs. Defendant Citibank N.A. ("Citibank") is a federally chartered national banking association with its principal place of business in New York, New York. Defendant Citigroup Global Markets Inc. is a corporation organized and existing under the laws of the State of New York, with its principal place of business in New York, New York. Defendant Citigroup Global Markets Limited is a corporation organized and existing under the laws of England and Wales, with its principal place of business in London, England. Citibank, Citigroup Global Markets Inc., and Citigroup Global Markets Limited are registered as swap dealers with the CFTC, and, during the relevant period, they entered into IRS contracts with the buy-side in the United States. As part of the conspiracy, Citibank, Citigroup Global Markets Inc.,

and Citigroup Global Markets Limited agreed with the other Defendants to, and did, boycott the Plaintiffs' platforms, located in New York. In addition, Citigroup Global Markets Inc. is registered as a broker-dealer with the SEC, and as an FCM with the CFTC, and refused to clear trades on Plaintiffs' platforms as part of the conspiracy.

41. As used herein, the term "Citi" includes Defendants Citigroup, Citibank, Citigroup Global Markets Limited, Citigroup Global Markets Inc., and their subsidiaries and affiliates, including but not limited to Citigroup Energy Inc., that participated in the IRS market.

42. Defendant Credit Suisse Group AG is a corporation organized and existing under the laws of Switzerland with its principal place of business in Zurich, Switzerland. Credit Suisse Group AG was a shareholder of Tradeweb during the relevant period and was part of the conspiracy against Plaintiffs. Defendant Credit Suisse International is a bank organized and existing under the laws of England and Wales, with its principal place of business in London, England. Credit Suisse International is registered as a swap dealer with the CFTC, and, during the relevant period, it entered into IRS contracts with the buy-side in the United States. As part of the conspiracy, Credit Suisse International agreed with the other Defendants to, and did, boycott the Plaintiffs' platforms, located in New York. Defendant Credit Suisse Securities (USA) LLC is a corporation organized and existing under the laws of the State of Delaware with its principal place of business in New York, New York. Credit Suisse Securities (USA) LLC is registered as a broker-dealer with the SEC, and as an FCM with the CFTC, and refused to clear trades on Plaintiffs' platforms as part of the conspiracy.

43. As used herein, the term "Credit Suisse" includes Defendants Credit Suisse Group AG, Credit Suisse International, Credit Suisse Securities (USA) LLC, and their subsidiaries and affiliates that participated in the IRS market.

44. Defendant Deutsche Bank AG is a corporation organized and existing under the laws of Germany with its principal place of business in Frankfurt, Germany. Deutsche Bank AG was a shareholder of Tradeweb during the relevant period and was part of the conspiracy against Plaintiffs. In addition, Deutsche Bank AG is registered as a swap dealer with the CFTC, and, during the relevant period, it entered into IRS contracts with the buy-side in the United States. As part of the conspiracy, Deutsche Bank AG agreed with the other Defendants to, and did, boycott the Plaintiffs' platforms, located in New York. Defendant Deutsche Bank Securities Inc. is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. In addition, Deutsche Bank Securities Inc. is registered as a broker-dealer with the SEC, and as an FCM with the CFTC, and refused to clear trades on Plaintiffs' platforms as part of the conspiracy.

45. As used herein, the term "Deutsche Bank" includes Defendants Deutsche Bank AG, Deutsche Bank Securities Inc., and their subsidiaries and affiliates that participated in the IRS market. Deutsche Bank maintains a New York branch.

46. Defendant The Goldman Sachs Group, Inc. ("Goldman Sachs Group") is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. The Goldman Sachs Group was a shareholder in Tradeweb during the relevant period and was part of the conspiracy against Plaintiffs. Defendant Goldman Sachs & Co. is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. Defendant Goldman Sachs Bank USA is a New York state-chartered bank, with its principal place of business in New York, New York. Defendant Goldman Sachs Financial Markets, L.P. is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New

York, New York. Defendant Goldman Sachs International is a bank organized and existing under the laws of England and Wales, with its principal place of business in London, England.

Goldman Sachs & Co.; Goldman Sachs Bank USA; Goldman Sachs Financial Markets, L.P.; and Goldman Sachs International are registered as swap dealers with the CFTC, and, during the relevant period, they entered into IRS contracts with the buy-side in the United States. As part of the conspiracy, Goldman Sachs & Co.; Goldman Sachs Bank USA; Goldman Sachs Financial Markets, L.P.; and Goldman Sachs International agreed with the other Defendants to, and did, boycott the Plaintiffs' platforms, located in New York. In addition, Goldman Sachs & Co. is registered as a broker-dealer with the SEC, and as an FCM with the CFTC, and refused to clear trades on Plaintiffs' platforms as part of the conspiracy.

47. As used herein, the term "Goldman Sachs" includes Defendants Goldman Sachs Group, Goldman Sachs & Co., Goldman Sachs Bank USA, Goldman Sachs Financial Markets, L.P., Goldman Sachs International, and their subsidiaries and affiliates that participated in the IRS market.

48. Defendant HSBC Bank PLC is a bank organized and existing under the laws of England and Wales, with its principal place of business in London, England. Defendant HSBC Bank USA, N.A. is a federally chartered national banking association with its principal place of business in McLean, Virginia, and branch locations in New York, New York. HSBC Bank PLC and HSBC Bank, USA, N.A. are registered as swap dealers with the CFTC, and, during the relevant period, they entered into IRS contracts with the buy-side in the United States. As part of the conspiracy, HSBC Bank PLC and HSBC Bank, USA, N.A. agreed with the other Defendants to, and did, boycott the Plaintiffs' platforms, located in New York. Defendant HSBC Securities (USA) Inc. is a corporation organized and existing under the laws of the State of Delaware, with

its principal place of business in New York, New York. Defendant HSBC Securities (USA) Inc. is registered as a broker-dealer with the SEC, and as an FCM with the CFTC, and refused to clear trades on Plaintiffs' platforms as part of the conspiracy.

49. As used herein, the term "HSBC" includes Defendants HSBC Bank PLC, HSBC Bank USA, N.A., HSBC Securities (USA) Inc., and their subsidiaries and affiliates that participated in the IRS market.

50. Defendant J.P. Morgan Chase & Co. is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. During the relevant period, J.P. Morgan Chase & Co. was a shareholder of Tradeweb and was part of the conspiracy against Plaintiffs. Defendant J.P. Morgan Chase Bank, N.A. is a federally chartered national banking association with its principal place of business in New York, New York. Defendant J.P. Morgan Securities LLC (also known as "J.P. Morgan Securities Inc.") is a corporation organized and existing under the laws of Delaware, with its principal place of business in New York, New York. Defendant J.P. Morgan Securities Plc is a corporation organized and existing under the laws of England and Wales, with its principal place of business in London, England, and it is a wholly owned subsidiary of J.P. Morgan Chase & Co. J.P. Morgan Chase Bank, N.A.; J.P. Morgan Securities LLC; and J.P. Morgan Securities Plc are registered as swap dealers with the CFTC, and, during the relevant period, they entered into IRS contracts with the buy-side in the United States. As part of the conspiracy, J.P. Morgan Chase Bank, N.A.; J.P. Morgan Securities LLC; and J.P. Morgan Securities Plc agreed with the other Defendants to, and did, boycott the Plaintiffs' platforms, located in New York. In addition, J.P. Morgan Securities LLC is registered as a broker-dealer with the SEC, and as an FCM with the CFTC, and refused to clear trades on Plaintiffs' platforms as part of the conspiracy.

51. As used herein, the term “JP Morgan” includes Defendants J.P. Morgan Chase & Co.; J.P. Morgan Chase Bank, N.A.; J.P. Morgan Securities LLC; J.P. Morgan Securities Plc, and their subsidiaries and affiliates that participated in the IRS market.

52. Defendant Morgan Stanley (“MS”) is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. During the relevant period, MS was a shareholder of Tradeweb and was part of the conspiracy against Plaintiffs. Defendant Morgan Stanley Bank, N.A. is a federally chartered national banking association with its principal place of business in Salt Lake City, Utah. Defendant Morgan Stanley & Co. LLC (“MS&C”) is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. Defendant Morgan Stanley Capital Services LLC is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. Defendant Morgan Stanley Derivative Products Inc. is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. Defendant Morgan Stanley & Co. International plc is a corporation organized and existing under the laws of England and Wales, with its principal place of business in London, England, and is a subsidiary of Morgan Stanley UK Group, the ultimate parent of which is MS. Defendant Morgan Stanley Bank International Limited is a bank organized and existing under the laws of England and Wales, with its principal place of business in London, England, and is a wholly owned subsidiary of Morgan Stanley International Holdings Inc., the ultimate parent of which is MS. Morgan Stanley Bank, N.A.; MS&C; Morgan Stanley Capital Services LLC; Morgan Stanley Derivative Products Inc.; Morgan Stanley & Co. International plc; and Morgan Stanley Bank International Limited are registered as swap dealers with the CFTC, and, during the relevant period, they

entered into IRS contracts with the buy-side in the United States. As part of the conspiracy, Morgan Stanley Bank, N.A.; MS&C; Morgan Stanley Capital Services LLC; Morgan Stanley Derivative Products Inc.; Morgan Stanley & Co. International plc; and Morgan Stanley Bank International Limited agreed with the other Defendants to, and did, boycott the Plaintiffs' platforms, located in New York. In addition, MS&C is registered as a broker-dealer with the SEC, and as an FCM with the CFTC, and refused to clear trades on Plaintiffs' platforms as part of the conspiracy.

53. As used herein, the term "Morgan Stanley" includes Defendants MS; Morgan Stanley Bank, N.A.; MS&C; Morgan Stanley Capital Services LLC; Morgan Stanley Derivative Products Inc.; Morgan Stanley & Co. International plc; Morgan Stanley Bank International Limited, and their subsidiaries and affiliates, including Morgan Stanley Capital Group Inc. and Morgan Stanley Capital Products LLC, that participated in the IRS market.

54. Defendant Royal Bank of Scotland PLC ("RBS PLC") is the primary operating bank of Defendant The Royal Bank of Scotland Group PLC ("RBS Group PLC"), a corporation organized and existing under the laws of England and Wales with its principal place of business in Edinburgh, Scotland and regional offices in New York, New York and Stamford, Connecticut. RBS PLC is registered as a swap dealer with the CFTC, and, during the relevant period, it entered into IRS contracts with the buy-side in the United States. As part of the conspiracy, RBS PLC agreed with the other Defendants to, and did, boycott the Plaintiffs' platforms, located in New York. During the relevant period, RBS Group PLC was a shareholder of Tradeweb and was part of the conspiracy against Plaintiffs. Defendant RBS Securities Inc. is a corporation organized and existing under the laws of Delaware, with its principal place of business in Stamford, Connecticut, and is a wholly owned subsidiary of RBS PLC. In addition, RBS

Securities Inc. is registered as a broker-dealer with the SEC, and as an FCM with the CFTC, and refused to clear trades on Plaintiffs' platforms as part of the conspiracy.

55. As used herein, the term "RBS" includes Defendants RBS PLC, RBS Group PLC, RBS Securities Inc., and their subsidiaries and affiliates that participated in the IRS market. RBS PLC maintains a New York branch.

56. Defendant UBS AG is a corporation organized and existing under the laws of Switzerland with its principal places of business in Basel and Zurich, Switzerland and regional offices in New York, New York and Stamford, Connecticut. UBS AG is registered as a swap dealer with the CFTC, and, during the relevant period, it entered into IRS contracts with the buy-side in the United States. As part of the conspiracy, UBS AG agreed with the other Defendants to, and did, boycott the Plaintiffs' platforms, located in New York. UBS AG was a shareholder of Tradeweb. Defendant UBS Securities LLC is a corporation organized and existing under the laws of Delaware, with its principal place of business in New York, New York. UBS Securities LLC is registered as a broker-dealer with the SEC, and as an FCM with the CFTC, and refused to clear trades on Plaintiffs' platforms as part of the conspiracy.

57. As used herein, the term "UBS" includes Defendants UBS AG, UBS Securities LLC, and their subsidiaries and affiliates that participated in the IRS market. UBS maintains a New York branch.

58. Defendant ICAP Capital Markets LLC is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Jersey City, New Jersey. ICAP Capital Markets LLC is a broker for billions of dollars of interest rate derivative transactions. Defendant ICAP SEF (US) LLC is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Jersey City, New Jersey.

Defendant ICAP Global Derivatives Limited is a corporation organized and existing under the laws of England and Wales, with its principal place of business in London, England. ICAP SEF (US) LLC and ICAP Global Derivatives Limited are registered as SEFs with the CFTC.

59. As used herein, the term “ICAP” includes Defendant ICAP Capital Markets LLC, ICAP SEF (US) LLC, ICAP Global Derivatives Limited, and their subsidiaries and affiliates that acted as brokers for a wide range of asset classes, including IRS, foreign currency, commodities, CDS, and various equities. In the IRS market, ICAP acts as an IDB, brokering IRS trades between dealers. In the IRS market, ICAP acts as an IDB, brokering IRS trades between dealers. As explained below, ICAP agreed with the Dealer Defendants that it would not allow its platforms to be accessed by the buy side of the IRS market.

60. Defendant Tradeweb Markets LLC (“Tradeweb Markets”) is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. In addition, Tradeweb Markets is the successor by merger to Tradeweb NewMarkets LLC, a financial services company with its principal place of business in New York, New York. As used herein, the term “Tradeweb” includes Tradeweb Markets and its subsidiaries and affiliates that provided trading services for IRS, CDS, and other asset classes. Tradeweb has historically focused on providing electronic trading services in the dealer-to-customer side of the market. Tradeweb is jointly owned by Thomson Reuters and a consortium of Dealer Defendants. Besides Tradeweb ownership stakes of some Dealer Defendants, all of the Dealer Defendants exercise control over Tradeweb through their dominance of its boards and governance committees, and their provision of liquidity to its platforms. As explained below, the Dealer Defendants took control of Tradeweb to prevent it from developing an IRS trading platforms that would end the artificial bifurcation between efficient dealer-to-dealer transactions

and antiquated, costly dealer-to-customer trades. Tradeweb agreed with the Dealer Defendants to abide by their wishes.

JURISDICTION AND VENUE

61. Plaintiffs bring this action under Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 and 26, to recover treble damages and costs of suit, including reasonable attorneys' fees, against Defendants for the injuries to Plaintiffs alleged herein, arising from Defendants' violations of Section 1 of the Sherman Act, 15 U.S.C. § 1.

62. This Court has subject matter jurisdiction over this action pursuant to Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15(a) and 26, as well as pursuant to 28 U.S.C. §§ 1331 and 1337(a).

63. Venue is proper in this District pursuant to 15 U.S.C. §§ 15(a) and 22, as well as pursuant to 28 U.S.C. § 1391(b), (c), and (d), because Plaintiffs resided, transacted business, were found, or had agents in this District; all the Defendants resided, transacted business, were found, or had agents in this District; a substantial part of the events or omissions giving rise to these claims occurred in this District; and a substantial portion of the affected interstate trade and commerce discussed herein was carried out in this District.

64. Defendants' activities, and those of their co-conspirators, were within the flow of, were intended to, and had a substantial effect on interstate commerce.

65. Pursuant to the nationwide contacts test provided for by 15 U.S.C. § 22, many Defendants are subject to personal jurisdiction in the United States because they were formed in or have their principal places of business in the United States. In addition, all members of the conspiracy are subject to personal jurisdiction in this District because the conspiracy was directed at, carried out in substantial part in, and had the intended effect of, causing injury to Plaintiffs residing in, located in, or doing business throughout the United States. For example,

the Defendants directly conspired through and with Tradeweb, whose principal place of business is in New York, New York, and at Tradeweb Board of Directors meetings in Miami and elsewhere. Further, the Defendants conspired to boycott Javelin and TeraExchange, which are based in New York.

66. The Dealer Defendants are also subject to personal jurisdiction here because they each transacted business throughout the United States, including in this District, that was directly related to the claims at issue in this action. The IRS at issue in this action often included a contractual clause submitting the parties to jurisdiction in this District. Also, the IRS at issue were regularly traded through the desks of the Dealer Defendants located in New York. The Dealer Defendants are also subject to personal jurisdiction here because their affiliates and subsidiaries traded IRS swaps in the United States as their agents, and if these agents did not, the Dealer Defendants would have to have made those trades themselves.

FACTUAL ALLEGATIONS

I. THE MARKET FOR INTEREST RATE SWAPS

A. The Trading of Interest Rate Swaps

67. In the early days of IRS trading, IRS contracts were not standardized and typically had to be negotiated and documented on a trade-by-trade basis. As a result, IRS trading involved high transaction costs. Nonetheless, because IRS allowed parties to manage and hedge against movements in interest rates, they became widely used by a variety of investors. Many entities also began to use IRS to speculate on movements in interest rates.

68. Over time, IRS trading became more standardized. In 1987, the International Swaps and Derivatives Association (“ISDA”), created the ISDA Master Agreement, which outlines standard terms to govern OTC derivatives transactions, and became widely used. By no later than 2000, all of the material terms of most IRS — including the tenor (*i.e.*, the maturity or

term of the swap), the fixed rate, the reference index used to calculate floating payments, the payment frequency, and the timing of payments — were standardized, resulting in lower transaction costs and higher trading volumes. As a result, counterparties can enter into an IRS by simply agreeing upon the tenor, notional amount, fixed rate, and floating rate index.

69. Consequently, the IRS market has grown exponentially over the last three decades. From 2006 to 2014 alone, the outstanding notional value of IRS grew from \$230 trillion to \$381 trillion.

The Dealer-to-Customer Market

70. As demand for IRS increased, the Dealer Defendants positioned themselves as the exclusive market makers or liquidity providers in the IRS market. As market makers (also called the “sell-side”), these banks became the sellers of IRS, offering fixed and floating-rate cash flows to their customers — the so-called “buy-side.”

71. IRS trading typically works as follows: A buy-side customer asks a dealer for a quote either: (1) to pay the floating rate and receive a fixed rate, or (2) to pay the fixed rate and receive a floating rate. The rate at which the dealer will pay the fixed rate is known as the “bid,” and the rate at which it will receive the fixed rate is known as the “offer” or the “ask.” In a simple example, a five-year IRS may be quoted by a dealer at a bid of 2.00% and an ask of 2.05%, meaning that the dealer will either pay the fixed rate at a 2.00%, or receive a fixed rate of 2.05%. The difference between the bid of 2.00% and the ask of 2.05% is referred to as the “bid/ask spread” (or “bid/offer spread” or “spread”).

72. The fixed rate is the primary term that is subject to negotiation when entering into an IRS trade. A buy-side customer that seeks to pay the floating and receive the fixed rate will receive the “bid” price quoted by a dealer for the fixed rate. A buy-side customer seeking to pay

the fixed rate and receive the floating rate will pay the “ask” or “offer” price quoted by a dealer for the fixed rate. The floating rate in either case is typically based on LIBOR. In some cases, the terms of trade include an upfront cash payment, in one direction or another.

73. Generally speaking, the wider the spread between the bid and ask prices, the more money the Dealer Defendant makes and the more the IRS costs for the buy side. The mid-point of the spread is generally considered to be the mid-market price.

Voice Trading

74. Trading of IRS between dealers and buy-side customers has historically occurred in a voice-based, OTC market environment. In this environment, the trading process is almost exclusively conducted on the telephone, which has several features that limit the trading capabilities of the buy-side, while also providing significant advantages to the Dealer Defendants.

75. Voice-based trading in IRS forced the buy-side, for example, to rely exclusively on the Dealer Defendants for real-time pricing information because there was very little reliable pre-trade pricing visibility. Logistically, calling all available dealers for price information was not realistic, so often buy-side customers would engage a very small community of dealers. In addition, in order to obtain price information, buy-side customers would have to disclose to each dealer they called their identity, the direction of their trade (pay fixed or receive fixed), and notional amount. This provided a one-way flow of information about upcoming trades to the dealer, which it could in turn use to its own trading advantage.

76. Executing a trade in the voice-based IRS market was even more restrictive than the price discovery process. To complete a transaction, the Dealer Defendants required buy-side customers to execute trades “on the wire,” meaning that price quotes were only actionable when

the customer was on the phone with the dealer. This prevented buy-side customers from shopping around to many dealers, comparing all of the quotes, and forcing dealers to compete directly on price. The Dealer Defendants also often required buy-side customers to announce if they were putting one dealer “in competition” with other dealers, further minimizing price competition. Thus, buy-side customers were rarely able to avail themselves of the best prices in the market.

Electronic Trading

77. Electronic trading in fixed income securities was introduced in the mid-1990s and began gathering momentum in the IRS market in the early 2000s. Technology had the potential to make IRS trading much more efficient, transparent, and competitive for the buy-side, as it did in other financial markets. In the IRS market, however, the dealer-to-dealer and the dealer-to-customer markets took very different paths. Simply put, the former developed, while the latter did not (because of Defendants’ collusion). While the IDB platforms that support dealer-to-dealer trading evolved to promote transparency, ease of access, speed of execution, and reduced trading costs, the dealer-to-customer markets adopted protocols that replicated many of the historical voice-based OTC practices.

78. The only IRS trading platforms open to buy-side customers that have survived Defendants’ conspiracy typically use an RFQ protocol whereby an investor can request quotes from several dealers, but from no one else. This basically amounts to the investor calling dealers to obtain quotes, except using electronic messages instead of the telephone. As with a voice-based transaction, the RFQ protocol on these platforms is not anonymous — the customer must disclose its identity at the time of the request, as well as valuable information about the

customer's trading intentions, even if a trade is not agreed upon. Accordingly, these protocols, by design, largely replicate the limitations of the voice-based, OTC market.

79. The protocol differences between the two sides of this bifurcated market, as they exist today, are summarized in the following chart:



80. As this chart shows, whether a buy-side investor is trading over the telephone, in a Bloomberg chat, or through a dealer-to-customer platform, the investor is stuck trading in a way that largely replicates the limitations of the OTC market. In the RFQ protocols, buy-side customers do not have access to the real-time price transparency or competitive pricing found in other modern financial markets that facilitate all-to-all trading.

The Dealer-to-Dealer Market

81. In marked contrast, as shown in the chart above, the Dealer Defendants trade with *each other* in a separate interdealer marketplace that developed more naturally to have far more competitive protocols. When dealers want to lay off risk on other dealers, they trade on dealer-only competitive and transparent platforms provided by IDBs. These platforms are very different than the inefficient trading mechanism to which the Dealer Defendants relegate their buy-side customers.

82. When trading with each other on an IDB platform, dealers submit their bid and ask prices to the IDB, which then publicizes the best quotes (known as the “inside market”) anonymously to all other dealers on the platform. A dealer can immediately enter into an IRS contract at a quoted price without negotiation, or it can ask the IDB to attempt to negotiate (commonly referred to as “tighten up”) a better price. Because several standardized IRS products have been actively traded for years, IDBs use electronic trading platforms akin to “order books,” “limit order books,” or “central limit order books,” which automatically match the best bids and offers. In return for facilitating dealer-to-dealer trades, an IDB earns a commission, known as a “brokerage fee” on each.

83. The price transparency and immediate execution available in interdealer IRS trading yields direct price competition among dealers. As noted, the interdealer market is also pre-trade anonymous: the dealers’ identities are concealed from one another until they agree to enter into a trade. This prevents any entity on an interdealer platform from being discriminated against in terms of pricing. It is only at the time of execution, post-trade, that counterparty identities must be revealed — as discussed below, this requirement (known as “name give-up”)

is imposed so that the Dealer Defendants can ensure that no buy-side customers are trading on the IDB platforms.

The Dealer Defendants Block All-to-All Trading

84. While only dealers have access to limit order book trading, nothing about the IRS market inherently requires that to be the case. Quite the opposite: because of the standardization of IRS, increased liquidity, and the availability of clearing, much of the IRS market should have moved years ago to all-to-all trading platforms.⁷ And there are a number of reasons why the buy-side would welcome all-to-all trading. “A centralised trading platform can bring together a large set of traders with opposing trading interests, reducing search frictions and raising competition to fill an order.”⁸ The introduction of all-to-all trading brings pricing transparency to the marketplace, typically resulting in a narrowing of bid/ask spreads.

85. The buy-side remains locked in an archaic market as a result of Defendants’ conspiracy to block access to the trading tools that the Dealer Defendants have enjoyed for years. The Dealer Defendants have restricted their buy-side customers from entering the interdealer market and relegated them to dealer-to-customer platforms that preserved many of the dealers’ inherent advantages (and buy-sides’ inherent restrictions) in the voice-based, OTC market.

86. The Dealer Defendants have also actively blocked the buy-side’s use of all-to-all trading platforms, which would give the buy-side access to competitive marketplaces similar to those the Dealer Defendants have enjoyed for years. When insurgent entities, such as Plaintiffs,

⁷ See DARRELL DUFFIE, DARK MARKETS 6-7 (2012) (“[S]imple interest rate swaps . . . seem like natural candidates for exchange-based trade but are normally traded over the counter. At this point, we lack convincing theories that explain why such simple and heavily traded instruments are traded over the counter.”).

⁸ See BANK FOR INT’L SETTLEMENTS, ELECTRONIC TRADING IN FIXED INCOME MARKETS 23 (2016), <http://www.bis.org/publ/mktp07.pdf>.

tried to bring all-to-all trading to the market or open existing IDB platforms to the buy-side, the Dealer Defendants actively preserved the status quo by using their collective market power to prevent such efforts from succeeding.

B. The Infrastructure for IRS Trading

87. As IRS developed into standardized and highly liquid financial products, the technology and supporting infrastructure for all-to-all trading of IRS was readily available. An example of this infrastructure is central clearing. Long before Dodd-Frank mandated in 2010 that IRS and other swaps be cleared through central clearinghouses, IRS were fully capable of being centrally cleared for both the dealers and buy-side customers.

88. A clearinghouse is an entity designed to step in the middle of a bilateral trade to reduce counterparty risk. A clearinghouse becomes the counterparty to both buyer and seller, and turns the transaction into two separate trades: a sale from the seller to the clearinghouse, and then a sale from the clearinghouse to the buyer. An advantage of cleared trades is that every trade participant faces the same counterparty — the clearinghouse. As a result, market participants do not need to evaluate the creditworthiness of their counterparty before every deal. Central clearing also eliminates the need for ISDA agreements between counterparties because they no longer face each other. Central clearing helps lay the groundwork for all-to-all anonymous trading by bringing buyers and sellers to a centralized platform, creating the infrastructure for the processing of trades, and eliminating case-by-case creditworthiness assessments.

89. Financial contracts have been cleared going back to the latter stages of the 19th century. The clearing of futures and other exchange traded derivatives began in earnest in the early 20th century with commodity exchanges in New York and Chicago forming their own clearing houses. As financial markets grow in size and liquidity, contract terms tend to become more standardized, and eventually the vast majority of transactions take place in cleared all-to-all

anonymous trading environments. This pattern has taken place in equities as well as commodities where the vast majority of trading volume takes place on exchanges.

90. Central clearing of buy-side IRS trades was feasible by, at the latest, the early 2000s. By 2000, for example, dealers were clearing interdealer IRS trades through an entity they effectively controlled called SwapClear, and, by the mid-2000s, Swapclear cleared the majority of interdealer trades. Because the type, size, and maturity of buy-side trades are similar to those of interdealer IRS trades, it would have been straightforward to extend central clearing to the buy side. One obvious option was to use a clearing model known as the futures commission merchant or “FCM” clearing model — which is the model that was used for many asset classes by the early 2000s and is used by the IRS market today.

91. Generally speaking, clearing works as follows: Two counterparties agree upon the terms of an IRS transaction. The first counterparty is to receive a fixed rate and pay a floating rate while the second counterparty is to receive a floating rate and pay a fixed rate. Rather than execute an IRS transaction with each other (as in a bilateral transaction), each counterparty enters into an IRS transaction with a central clearinghouse. The first counterparty enters into an IRS with the clearinghouse where it receives a fixed rate and pays a floating rate while the clearinghouse receives a floating rate and pays a fixed rate; and the second counterparty enters into an IRS with the clearinghouse where the second counterparty receives a floating rate and pays a fixed rate while the clearinghouse receives a fixed rate and pays a floating rate.

92. The clearinghouse is neutral as to these two transactions. The financial transfers from the first transaction are completely offset by the financial transfers from the second transaction. The counterparties, on the other hand, pay and receive the same financial transfers as if they had entered into a non-cleared bilateral IRS transaction. The two counterparties, however,

do not have a direct contractual relationship, thus effectively eliminating the risk the other counterparty may default on its contractual obligations. By removing this risk, buy-side investors can trade anonymously on electronic trading platforms, without being concerned whether a counterparty will fulfill its contractual obligations.

93. While this arrangement decreases counterparty risk for the two trading parties, it does not decrease counterparty risk for the clearinghouse itself. To solve this problem, in many asset classes, FCMs serve as intermediaries between buy-side clients and the clearinghouse. The FCM establishes credit limits for its buy-side clients and posts collateral to the clearinghouse on behalf of the client, thereby assuring that all obligations of its clients will be met throughout the life of each transaction.

94. This FCM model (or other similar models) could have been readily applied to IRS by the early 2000s. The FCM clearing model has been used for decades to centrally clear a variety of complex financial instruments traded in an all-to-all environment, including futures, options, and other exchange-traded derivatives. Further proof that the FCM model for clearing IRS trades was feasible by the early 2000s is that it is the dominant method for clearing dealer-to-client IRS trades today. Nothing has changed from the early 2000s to the present that has changed the feasibility of the FCM model for IRS.

95. Indeed, as discussed further below, sophisticated industry players with a proven track record of bringing clearing and trading solutions to a variety of financial markets, including the Chicago Mercantile Exchange (“CME”), sought to provide those solutions for the IRS market but were stopped from doing so by the Dealer Defendants. No technological or infrastructure impediments prevented the opening of all-to-all IRS trading to the buy side.

96. By late 2007, the buy side was demanding all-to-all trading of IRS, IRS were fully capable of trading on modern electronic platforms with all-to-all trading protocols, and the infrastructure supporting those protocols existed. There were, therefore, no natural or technological reasons why the IRS market did not evolve by 2008, at the latest, to allow the buy side to conduct all-to-all trading of IRS on electronic trading platforms. The only reason the market did not develop in that way is because Defendants conspired to prevent it from occurring.

C. The Dodd-Frank Act

97. In reaction to the fallout from the 2008 financial crisis, Congress passed Dodd-Frank on July 21, 2010. Among the stated purposes of the legislation was to “promote the financial stability of the United States by improving accountability and transparency in the financial system” and to “protect consumers from abusive financial services practices.”⁹

98. A key goal of Dodd-Frank was “to bring greater pre-trade and post-trade transparency to the swaps market.”¹⁰ As the CFTC noted: “The OTC swaps market is less transparent than exchange-traded futures and securities markets.”¹¹ The CFTC also recognized that “transparency lowers costs for investors, consumers, and businesses; lowers the risks of the swaps market to the economy; and enhances market integrity to protect market participants and the public. . . all market participants will benefit from viewing the prices of available bids and offers and from having access to transparent and competitive trading systems or platforms.”¹²

⁹ Dodd-Frank Wall Street Reform and Consumer Protection Act Preamble, PL 111-203, Preamble, 124 Stat 1376, 1376 (2010).

¹⁰ Core Principles and Other Requirements for Swap Execution Facilities, 78 Fed. Reg. 33476, 33477 (June 4, 2013) (to be codified at 17 C.F.R. pt. 37).

¹¹ *Id.* at 33476.

¹² *Id.* at 33477.

99. As part of Dodd-Frank, Congress created SEFs, a new type of CFTC-regulated entity defined as “a trading system or platform in which multiple participants have the ability to execute or trade swaps by accepting bids and offers made by multiple participants in the facility or system.”¹³

100. Congress also mandated that IRS move to exchanges or SEFs to be centrally cleared. Dodd-Frank employs an FCM model of clearing, which effectively makes the Dealer Defendants’ FCM divisions gatekeepers for IRS clearing.¹⁴

101. While Dodd-Frank authorized the CFTC to oversee the swaps market, the Act expressly preserved the operation of the antitrust laws to address collusive conduct such as the Defendants’ boycott conspiracy.¹⁵

II. PLAINTIFFS’ CREATION OF ALL-TO-ALL INTEREST RATE SWAPS TRADING PLATFORMS

102. By at least 2008, the IRS market was primed and ready for the introduction of all-to-all electronic trading. Hundreds of trillions of IRS were traded in standard types. There was no longer any need to maintain a privileged set of dealers to provide liquidity in the market. OTC dealers are sometimes useful sources of immediacy for infrequently traded financial instruments

¹³ 17 C.F.R. § 1.3.

¹⁴ There are only approximately twenty active FCMs for IRS trading, and all but two are owned by the Dealer Defendants. Société Générale and RBC operate the other two, but they clear very small volumes. State Street operated an FCM for a short period in 2014, but it cleared only a small number of trades. Tod Skarecky, *FCM Rankings – Q3 2016*, CLARUS FIN. TECH. (Nov. 16, 2016), <https://www.clarusft.com/fcm-rankings-q3-2016/>.

¹⁵ See 12 U.S.C. § 5303 (2010) (“Nothing in this Act, or any amendment made by this Act, shall be construed to modify, impair, or supersede the operation of any of the antitrust laws, unless otherwise specified.”). See also 156 CONG. REC. E1347-01 (2010), 2010 WL 2788137 (statement of Rep. John Conyers, Jr.) (“The final bill contains a number of provisions to ensure that the antitrust laws remain fully in effect.”).

where it would be rare for any two buy-side firms to have reasons to trade at or around the same time. But that does not describe the majority of the IRS market and has not for many years.

103. The benefits that central clearing and all-to-all trading could bring to the IRS market were widely recognized by market participants, regulators, and economists, there was tremendous demand for modern, electronic trading platforms for IRS.

A. Javelin's Development of an All-to-All Trading Platform

104. Javelin was founded in 2009 by derivative trading and technology professionals seeking to pursue the obvious market demand for a SEF offering all-to-all electronic trading. Javelin's founders strongly supported the goals of Dodd-Frank to enhance pre-trade transparency, market liquidity, and competition in the swaps market.

105. Javelin developed an all-to-all IRS trading platform focused on providing trading choices to all IRS traders, including name-disclosed RFQ, anonymous RFQ, and anonymous order book trading. This would have been a major step forward for the buy-side, granting them access to an anonymous all-to-all trading platform similar to the IDB platforms used by the Dealer Defendants.

106. In developing its SEF, Javelin created a cutting edge technological platform designed to provide IRS traders the market transparency they long demanded. Javelin created a state-of-the-art user interface that keeps traders in touch with all of the market action. Users of Javelin's order book can view the size and depth of either the historical market or just the day's market action, and anonymously execute a trade with a click of a mouse. Javelin's trading platform's screens are highly customizable and any configuration can be saved, thereby empowering market participants to execute, manage, and modify orders efficiently.

107. Javelin also developed technology to allow customers to use its trading platform. Javelin created options to allow market participants to trade electronically on its SEF either

through an application program interface developed by Javelin or an industry standard third party gateway.

108. The development of Javelin's SEF and technology platform demanded enormous industry knowledge and technological skill, thereby requiring the employment of numerous technology, operations, and sales experts. Javelin also incurred substantial expenses, including office rental, data center fees, licenses for software and financial vendor platforms, and legal and compliance advice. Javelin ultimately spent over \$28 million in connection with the development and operation of its all-to-all electronic IRS platform.

109. By 2011, Javelin's order book was ready for testing. While conducting test trials in December 2011, Javelin became the first platform to execute and clear IRS trades in a nearly instantaneous manner, with an average elapsed time of under two seconds. This near instant execution and clearance of trades was highly enticing to IRS traders long-accustomed to lengthy execution and clearance times for OTC and RFQ transactions. Around this time, investors estimated Javelin's valuation to be approximately \$57 million.

110. Javelin primarily focused on offering an order book with an all-to-all liquidity pool. Javelin's trading platform granted all customers price transparency, firm and anonymous pricing, IDB-type pricing for all customers, and compliance with Dodd-Frank swap trading requirements. In addition, Javelin's platform was clearing agnostic, giving customers a choice of clearinghouse for their swaps business.

111. By 2013, Javelin created its own live credit check system, called the Credit Limit Management System ("CLMS"), so FCMs could push pre-trade credit limits for their customers to Javelin. CLMS allowed Javelin to confirm whether a customer had sufficient credit with their

FCM to execute and clear a trade on Javelin's platform. Javelin also connected to credit hubs developed by other entities, such as Traiana Inc., to conduct pre-trade credit checks.

112. On September 19, 2013, the CFTC granted Javelin temporary registration as a SEF.¹⁶ At this point, Javelin's SEF was ready for business and well positioned to meet the large demand by IRS traders for a transparent, anonymous all-to-all trading platform compliant with Dodd-Frank. On October 1, 2013, Javelin successfully executed and cleared its first trade as a SEF.

113. Javelin SEF was a major step forward for the buy-side customers, granting them access to an all-to-all trading platform similar to those used by the Dealer Defendants. Not surprisingly, many prominent buy-side firms, such as Annaly Capital Management, Inc. ("Annaly"), AQR Capital Management, Blackwell Partners, Carlson Capital, Citadel LLC ("Citadel"), the Duke Endowment, Duke University LTP, Eaton Vance, Flagstar, ING Group, the John D. and Catherine T MacArthur Foundation, Lloyds Bank, Mitsubishi UFJ Financial Group ("Mitsubishi"), Mizuho Securities, the National Bank of Canada, Natixis Global Asset Management ("Natixis"), PIMCO, Scotiabank, and Suntrust, became interested in trading on Javelin's all-to-all platforms and, by late 2014, Javelin had signed up (or "onboarded") approximately 80 entities to trade on its platforms.

114. Javelin was poised to earn very substantial brokerage fees as the first all-to-all electronic IRS trading platform. Javelin would have earned these fees but for the Defendants' boycott conspiracy.

¹⁶ In 2013, the CFTC was only temporarily registering SEFs. Even with temporary registration, Javelin SEF and other SEFs were permitted to facilitate trading as SEFs. The CFTC did not award full registration for any SEFs until 2016, when the CFTC granted Javelin SEF full registration. U.S. Commodity Futures Trading Commission, *Trading Organizations – Swap Execution Facilities (SEF)*, <http://sirt.cftc.gov/SIRT/SIRT.aspx?Topic=SwapExecutionFacilities> (last visited Dec. 9, 2016). The CFTC granted TeraExchange full SEF registration on May 26, 2016.

B. TeraExchange's Development of an All-to-All Trading Platform

115. TeraExchange was founded in 2010 by trading and technology professionals who recognized that Dodd-Frank provided a unique opportunity to advance the swaps market beyond the bilaterally negotiated OTC process. After raising \$7 million in capital on a \$27 million valuation, TeraExchange expended immense effort to develop all-to-all electronic trading platform with anonymous order book and anonymous RFQ functionality for several asset classes, including IRS.¹⁷

116. TeraExchange developed a number of necessary technologies for its electronic trading platform, including connectivity with the various clearinghouses, swap data repositories, and other intermediaries. TeraExchange also created a front-end execution management system for traders with order management capabilities, along with advanced analytics and charting, full market depth, and real-time pricing.

117. TeraExchange provides users flexibility and choice in accessing TeraExchange's order book, including remote access, local installation, access through established trading networks, and an application program interface to allow access from in-house applications. TeraExchange also allows traders to engage in other IRS trading protocols if needed, including an anonymous all-to-all RFQ, request for market and indication of interest, though TeraExchange's all-to-all order book was its primary platform.

118. The development of TeraExchange's all-to-all trading platform demanded enormous industry knowledge and technological skill, requiring the employment of many technology, operations, and sales experts. TeraExchange incurred other substantial expenses,

¹⁷ TERAEXCHANGE, <http://www.teraexchange.com/Home/About> (last visited Dec. 9, 2016).

including office rental, data center fees, licenses for software and financial vendor platforms, and legal and compliance advice.

119. In 2011, while waiting on the CFTC to formalize SEF registration rules under Dodd-Frank, TeraExchange began offering access to its electronic trading platform.

TeraExchange offered numerous features sought by IRS customers, including a price-time priority order book, anonymity, open all-to-all access, pre- and post-trade transparency, executable bids and offers, pre-trade credit checks, improved pricing, reduced transaction costs, and free access to TeraExchange's trading technology.

120. By 2012, TeraExchange had developed a live credit confirmation tool to facilitate trade clearing, known as TeraCheck, which enabled TeraExchange to perform pre-trade credit checks using customer credit information pushed to TeraExchange by the customer's FCM. In addition to TeraCheck, TeraExchange developed technology to connect to credit hubs created by other entities, such as the hub operated by Traiana, Inc., thereby enabling TeraExchange to offer FCMs multiple options for pre-trade risk mitigation.

121. The benefits that TeraExchange offered to the derivatives marketplace, and the great amount of time and effort spent to address the needs of the end user, did not go unnoticed by the financial community. The *Wall Street Letter*, a respected source of information on trading technology, nominated TeraExchange for three of its 2013 Institutional Trading Awards. TeraExchange received a "Highly Commended" award for best derivatives trading platform.

122. Following the CFTC's finalization of SEF registration rules, TeraExchange spent substantial resources to make its platform compliant with the final rules and submitted the necessary materials for SEF registration. TeraExchange received a temporary SEF certification on September 19, 2013 and a full SEF registration on May 26, 2016. One market survey taken in

late 2013 indicated that market participants ranked TeraExchange among the top two SEFs that they planned to explore for trading.

123. By late 2013, investors had increased their estimate of TeraExchange's valuation to over \$50 million. TeraExchange was well positioned to earn very substantial brokerage fees as the only all-to-all order book platform to provide a real-time pre-trade credit check on all order submissions, as well as on its all-to-all RFQ. TeraExchange would have earned these brokerage fees but for the Defendants' conspiracy described below.

III. DEFENDANTS CONSPIRED TO BOYCOTT JAVELIN, TERAEXCHANGE, AND OTHER ALL-TO-ALL TRADING PLATFORMS

124. Industry observers noted that SEFs such as Javelin and TeraExchange were "poised to take business from the big banks that have dominated swaps trading" following the CFTC's preliminary approval of SEFs.¹⁸ Faced with this threat, the Dealer Defendants conspired to prevent all-to-all trading from introducing greater competition and transparency. None of the Dealer Defendants acting alone could stop such trading platforms from succeeding. The Dealer Defendants instead worked together to ensure that Javelin, TeraExchange, and other all-to-all trading platforms would not succeed.

125. As detailed below in Section IV, the Dealer Defendants coordinated their conspiracy through numerous forums, including their joint involvement with Tradeweb, the International Swaps and Derivatives Association ("ISDA"), and the Futures Industry Association ("FIA").

126. Personnel from the Dealer Defendants' strategic investment groups, which, as also detailed below in Section IV, are organized for the specific purpose of protecting the dealer

¹⁸ Matthew Leising, *A Safer Way to Trade Interest Rate Swaps*, BLOOMBERG (Feb. 27, 2014), <http://www.bloomberg.com/bw/articles/2014-02-27/interest-rate-swaps-trading-comes-out-of-the-shadows>.

community from the growth of all-to-all trading, organized and perpetuated the conspiracy at issue through regular meetings. Besides meeting through the boards of Tradeweb, ISDA, and the FIA, they met in informal settings to carry out an ongoing dialogue concerning their joint opposition to all-to-all trading platforms, which would result in the compression of bid/ask spreads and lower profits. During these secret discussions, these Dealer Defendant personnel mapped out strategies for neutralizing the threat posed by anonymous all-to-all trading platforms.

127. The heads of the Dealer Defendants' IRS trading desks also maintained an ongoing dialogue about their preferred structure of the IRS market. Besides meeting through the boards of Tradeweb, ISDA, and the FIA, these "heads of rates" regularly communicated through email and Bloomberg messages, at lunches, dinners, industry conferences, and other events. In these communications, they discussed their mutual desire to maintain the status quo and prevent anonymous all-to-all electronic trading.¹⁹

The Dealer Defendants Boycott All-to-All Trading Platforms

128. The Dealer Defendants prevented the emergence of all-to-all trading, principally, by boycotting market entrants like Javelin and TeraExchange that dared to try to open up electronic all-to-all IRS trading platforms to the buy-side. These efforts have "been relentless — sometimes buried in SEF rulebooks and trading workflow minutia, and other times amounting to

¹⁹ As noted below, many of these trading desk heads were also installed on Tradeweb boards, including the following: Luke Halestrap (Head of Emerging Markets Interest Rates at Bank of America), Nicholas Brophy (Head of Rates Trading in the Americas at Citi), Timothy Blake (Head of U.S. Interest Rate Products at Credit Suisse), Michele Faissola (Head of Global Rates at Deutsche Bank), Stephen Wolff (Head of Strategic Investments and Head of Fixed Income e-Commerce at Deutsche Bank), Simon Maissey (Head of eCommerce for Global Rates at JP Morgan), Christopher Paul Willcox (Global Head of Rates Trading and Global Rates Strategic Investments at JP Morgan (and later a Managing Director at Tradeweb)), Kemal Askar (Head of Rates Trading in the United States at JP Morgan), David Moore (Head of Global Rates at Morgan Stanley), Richard Volpe (Global Head of Dollar Interest Rates at RBS), and Paolo Croce (Head of European Rates at UBS).

outright intimidation.”²⁰ The Dealer Defendants needed to act together to ensure that neither Javelin nor TeraExchange gathered enough liquidity from a few Dealer Defendants or alternative liquidity providers. As a result of these collective steps, Defendants have successfully prevented meaningful change in the market.²¹

129. As Richard Mazzella, Chief Operating Officer for Global Fixed Income at Citadel explained, there remains “a two-tier market today on the S[EF]s — dealer-to-dealer and dealer-to-client” and “[i]t is not truly an all-to-all market.”²² Similarly, Darcy Bradbury of D.E. Shaw, a buy-side institution, has commented that “we’ve ended up with a bifurcated market where you have a couple of customer-to-dealer SEFs where basically that’s the only place the customers can trade. And then you have the deeper pools of liquidity, the central limit order books, at the interdealer broker SEF platforms.”²³ Ms. Bradbury added that the buy side wants “to be able to use central limit order books instead of just the RFQ process that’s available on the customer-to-

²⁰ DENNIS KELLEHER, CAITLIN KLINE, & VICTORIA DAKA, STOPPING WALL STREET’S DERIVATIVES DEALERS CLUB 12 (Feb. 2016), <https://www.bettermarkets.com/sites/default/files/Better%20Markets%20Policy%20Brief%20%20Stopping%20Wall%20Street%E2%80%99s%20Derivatives%20Dealers%20Club.pdf>.

²¹ See Matthew Leising, *Swaps Revolution Falling Flat as Brokers Keep Grip on New Market*, BLOOMBERG (Mar. 4, 2014), <http://www.bloomberg.com/news/articles/2014-03-05/swaps-revolution-falling-flat-as-brokers-keep-grip-on-new-market> (“Two weeks after the regulatory shift related to the Dodd-Frank Act took effect, there’s been little change — and little indication that it’s coming. Banks are trading interest-rate swaps exclusively with banks in one area, while buyers and sellers such as money managers are doing business in another.”).

²² Peter Madigan, *Buy-side firms slam broker Sefs over lack of anonymity*, RISK (Oct. 24, 2014), <http://www.risk.net/risk-magazine/news/2377259/buy-side-firms-slam-broker-sefs-over-lack-of-anonymity>.

²³ Transcript of the April 2, 2015 Meeting of the U.S. Commodity Futures Trading Commission Market Risk Advisory Committee Meeting, 140:2-8, http://www.cftc.gov/idx/groups/public/@aboutcftc/documents/file/mrac_040215_transcript.pdf.

dealer SEFs” because the platforms will allow end users to obtain “better information about what pricing is,” as well as “more competition” and “deeper pools of liquidity.”²⁴

130. The IRS market does not have to operate this way. Not long ago, before the Defendants’ collusion became apparent, market participants forecasted “that 40 to 50 firms could end up competing for swaps execution business.”²⁵ Today, however, only Javelin, TeraExchange, and one or two other SEFs offer anything close to anonymous all-to-all trading, and those few are on their last legs.²⁶

131. When Javelin, TeraExchange, and other all-to-all trading platforms solicited the participation of the Dealer Defendants, the Dealer Defendants would speak with each other to ensure collective action with respect to the platform. They used a variety of tools to ensure that these platforms failed so they could keep the buy-side relegated to trading on dealer-to-customer platforms that are nothing more than the functional equivalent of the OTC marketplace.

The Dealer Defendants Refuse to Clear Trades on All-to-All Trading Platforms

132. The Dealer Defendants blocked trading on Javelin, TeraExchange, and other all-to-all trading platforms by not clearing trades coming from the platforms. Because Dodd-Frank effectively requires that any trades occurring on SEFs be cleared, the clearing subsidiaries of the Dealer Defendants could prevent those trades from occurring simply by causing their FCMs to refuse to clear.

²⁴ *Id.* at 140:9-19.

²⁵ Mike Kentz, *SEF start-ups face obstacles*, INT’L FIN. REV. (July 22, 2013), <http://www.ifre.com/sef-start-ups-face-obstacles/21099200.article>.

²⁶ *See id.* (noting that “market participants are beginning to doubt the viability of start-up platforms that were once assumed to be guaranteed a slice of the market”).

133. At the behest of the Dealer Defendants, clearinghouses have insisted on requiring clearing members to contribute large amounts of capital to the clearinghouse's default (or "guaranty") fund.²⁷ This practice of insisting that clearing members must satisfy extremely large capital requirements is unnecessary and is itself one way that the Dealer Defendants block entry and competition. Since large banks like the Dealer Defendants are generally the only entities that can satisfy these large capital requirements, they function as critical waypoints (or potential roadblocks) on the path to clearing.

134. As noted above, Dodd-Frank employed an FCM model for clearing, which effectively made the banks' FCM divisions gatekeepers for IRS clearing. The Dealer Defendants have come to use that gatekeeping role to further their conspiracy by refusing to clear IRS trades on trading platforms that utilize all-to-all trading protocols.

135. FCMs generate revenues by clearing trades on behalf of firms that are not clearing members of a clearinghouse. This relationship should be mutually beneficial — the FCMs earn fees on each trade they submit for clearing, and their customers are able to gain access to clearing without having to comply with onerous capital requirements.

136. By regulation, the Dealer Defendant FCMs must operate separately from the Dealer Defendants' trading desks, and the FCMs derive no revenues from IRS trading.²⁸ Thus,

²⁷ For example, CME requires clearing members to hold \$50,000,000 in capital *and* contribute at least \$15,000,000 in cash to its guaranty fund in order to clear IRS. *See* CME GROUP, *Summary of Requirements for CME, CBOT, NYMEX and COMEX Clearing Membership and OTC Derivatives Clearing Membership* (April 2016), <http://www.cmegroup.com/company/membership/files/summary-of-cme-group-clearing-membership-requirements.pdf>.

²⁸ *See* 17 C.F.R. §23.605(d)(1) ("No swap dealer or major swap participant shall directly or indirectly interfere with or attempt to influence the decision of the clearing unit of any affiliated clearing member of a derivatives clearing organization to provide clearing services and activities to a particular customer"); *id.* §23.605(d)(2) ("Each swap dealer and major swap participant shall create and maintain an appropriate informational partition . . . between business trading units of the swap dealer or major swap participant

in a competitive marketplace, FCMs would be agnostic as to which trading platforms their customers use and as to their customers' counterparties. In fact, an FCM operating in its own interest would, subject to credit limits, want to maximize the amount of trades it clears for customers, regardless of where or how the trades were executed. This is because the only risk that FCMs face is the risk that their buy-side clearing clients default, a risk in no way connected to the platform on which a customer conducts an IRS trade.

137. Determined to stop Javelin, TeraExchange, and other all-to-all SEFs, the Dealer Defendants jointly caused their FCMs to withhold clearing services from buy-side customers or second-tier dealers seeking to trade on SEFs operating all-to-all anonymous trading platforms open to the buy-side.²⁹

138. This coordinated misconduct was directly contrary to the economic self-interests of the Dealer Defendant FCMs and would not be economically rational if it did not further the interests of the Dealer Defendants' cartel. The FCMs nonetheless capitulated to the demands of their trading desks and management, who are focused on keeping buy-side customers from trading on anonymous all-to-all platforms.

139. FCMs must confirm that their customers are sufficiently creditworthy to execute and clear any given trade *before* the trade takes place, and will not allow the trade to move forward if a customer fails this "pre-trade credit check."³⁰ To prevent customers from trading on

and clearing units of any affiliated clearing member of a derivatives clearing organization to reasonably ensure compliance with the Act and the prohibitions specified in paragraph (d)(1) of this section.").

²⁹ See KELLEHER, ET AL., *supra* note 20, at 12 (noting that dealers "deny[] their clearing customers the credit limits necessary to trade on SEFs that don't acquiesce to the dealers' demands").

³⁰ A pre-trade credit check can occur via either a "ping" or a "push" system. Under a "ping" system, a SEF will "ping" an FCM on a per-trade basis to confirm if a customer has sufficient credit to conduct that trade. Under a "push" system, an FCM will pre-authorize a customer to clear trades up to a certain credit limit, a practice commonly referred to as "pushing limits." As an example, JP Morgan might "push" a

an all-to-all anonymous trading platform, the Dealer Defendant FCMs frequently refuse to conduct pre-trade credit checks for any prospective trade on an anonymous all-to-all SEF. When buy-side investors attempt to trade on an all-to-all anonymous SEF, the Dealer Defendants' FCMs refusal to conduct a pre-trade credit check means the trade cannot occur. FCMs therefore have the ability to act as gatekeepers by restricting the order flow of buy-side customers onto all-to-all platforms.

140. The Dealer Defendants routinely provide pre-trade credit checks and clear buy-side trades on other platforms that are not anonymous. In particular, they provide pre-trade credit checks and clear buy-side trades executed on co-conspirator Tradeweb's dealer-to-client RFQ or on other platforms that they do not view as threats to the bifurcated market structure. They refuse, however, to provide pre-trade credit checks or clear any trade by a buy-side entity executed on an IDB or an order book, including those operated by Bloomberg and Tradeweb, thereby making it effectively impossible for the buy side to trade on these platforms.³¹

141. The Dealer Defendants' ability to prevent clearing has blocked market entry for all-to-all anonymous trading platforms, including those offered by Javelin and TeraExchange. Without access to clearing, buy-side firms and second-tier dealers cannot trade on such platforms and are forced to trade on dealer-friendly SEFs like Tradeweb that retain the basic, inefficient dealer-to-customer trading structure of the OTC market.³²

limit of \$500 million to a SEF for its customer, buy-side customer X, meaning that X could trade and clear up to \$500 million of IRS on that SEF without needing to re-obtain approval from JP Morgan before every trade.

³¹ See KELLEHER, ET AL., *supra* note 20, at 12 (noting that dealers "deny[] their clearing customers the credit limits necessary to trade on SEFs that don't acquiesce to the dealers' demands").

³² The Dealer Defendants have used their "death-grip" on clearing to block startups offering anonymous, exchange-style trading in other markets as well, including the Treasury market.³² When Direct Match Holdings Inc. attempted to give more customers access to the same type of anonymous, exchange-style trading that banks have enjoyed for years in the Treasury market, it died without arranging even one trade

142. As a result of the Defendants' conspiracy, Javelin, TeraExchange, and other all-to-all trading platforms here have done little or no IRS trading.

A. The Dealer Defendants Boycotted Javelin

143. As described above, Javelin expended immense resources to develop an anonymous all-to-all trading platform. By 2011, Javelin was actively soliciting support for its platform by demonstrating its utility to many buy-side customers and dealers, including Dealer Defendants such as BNPP, Deutsche Bank, Goldman Sachs, JP Morgan, and RBS. Javelin offered Dealer Defendants, including BNPP, RBS, and HSBC, the opportunity to share in revenue on Javelin's platform in exchange for liquidity commitments to Javelin. Javelin also offered these dealers an opportunity to share in Javelin's success by receiving a portion of Javelin's brokerage fees if the dealers provided liquidity.

144. In September 2013, Javelin met with Tony Smith (Vice President, Network Engineering) and other Goldman Sachs executives in a meeting arranged by Cassandra Tok (Head of Futures and OTC Clearing Sales). At the meeting, the Goldman Sachs executives grilled Javelin on whether its platform had to allow all-to-all trading and fished for the names of buy-side customers signed up for Javelin's platform in order to later head off those customers from trading on the platform. Mr. Smith was careful not to state outright that Goldman Sachs would not support Javelin, but he demonstrated hostility to Javelin operating as an all-to-all trading platform.

145. A month before the Goldman Sachs meeting, Dexter Senft of Morgan Stanley asked Javelin personnel for a list of buy-side customers that had expressed interest in Javelin, as

because no bank would grant Direct Match access to clearing-and-settlement. *See* Matthew Leising & John Detrixhe, *Demise of Direct Match Shows Bank Death-Grip on Treasury Market*, BLOOMBERG (Aug. 29, 2016), <http://www.bloomberg.com/news/articles/2016-08-29/demise-of-direct-match-shows-bank-death-grip-on-treasury-market>.

well as the contact person for each firm as part of a purported “survey” on SEF activity. On August 6, 2013, Javelin personnel provided Senft with a list of 80 buy-side firms that were in various stages of engagement with Javelin, along with the contact person for each firm. Senft responded: “This list is exactly what I needed.” Shortly thereafter, Senft distributed this list to other Dealer Defendants so they would know which of their respective buy-side customers were considering or actually using the Javelin platform.

146. In late 2013, Javelin prepared to launch its platform and arranged a series of mock trading sessions to showcase its all-to-all anonymous trading platform and its credit check software to dealers and buy-side customers. Despite the refusal of some of the Dealer Defendant FCMs to even participate in the mock sessions, many buy-side firms and certain second-tier dealers were impressed by Javelin’s platform.

147. Based on the strength of its technology, Javelin began signing up customers, including Citadel, National Australian Bank, Natixis, Scotiabank, and Suntrust. Even with this limited initial liquidity, immediate price transparency and anonymity resulted in remarkably competitive pricing on the Javelin platform, with bid/ask spreads routinely one-quarter basis point wide, and often as low as one-eighth of a basis point wide.

148. Despite tentative initial support from RBS and a number of second-tier dealers, the Dealer Defendants uniformly refused to trade on Javelin’s platform. They recognized that if Javelin successfully launched an anonymous, all-to-all IRS trading platform, the platform would attract liquidity, increase price transparency, and thus imperil their privileged status as market makers in a bifurcated market.

149. The Dealer Defendants carefully coordinated their dealings with Javelin. At times, certain dealer personnel (including Senft of Morgan Stanley) even expressly asked for

modifications to provisions of Javelin's standard non-disclosure agreement that allowed one Dealer Defendant to discuss Javelin with other Dealer Defendants. Unaware that the Dealer Defendants were operating as an unlawful cartel, Javelin agreed to these modifications.

150. As detailed below, the Defendants' collective efforts to sabotage Javelin took several forms, including rationing liquidity away from Javelin, permanently delaying review of Javelin documents, threatening customers who used Javelin with a loss of liquidity in IRS and other products, and using affiliated FCMs to pressure or cajole customers away from Javelin under the threat of loss of services or increased clearing fees. Some Dealer Defendants used their FCMs to actively refuse pre-trade credit checks to Javelin.

The Dealer Defendants Refuse to Trade on Javelin

151. From late 2013 to 2015, Javelin met with senior employees at each of the Dealer Defendants on numerous occasions to discuss trading on or providing liquidity to the Javelin platform. Even when Dealer Defendant employees did not outright shut the door on trading or providing liquidity, they would repeatedly cite the same pretexts for refusing to conduct business with Javelin, such as claiming a need to conduct a never-ending legal review of the Javelin SEF rulebook, a largely standardized document already approved by the CFTC. Regardless of the excuse, the results were always the same: none of the Defendant Banks, except RBS for a limited period of time, offered to trade on or provide liquidity to Javelin. One Javelin employee was informed by an acquaintance who worked for a Dealer Defendant that he should "look for a new job."

152. In a conversation with a Javelin employee, Mario Muth of Deutsche Bank said that Deutsche Bank would never move onto an anonymous all-to-all platform because, according to Muth, it would damage the bank's core business model.

153. Although RBS did briefly provide liquidity to Javelin, it did not do so in a meaningful way. Instead, RBS primarily streamed prices at unfavorable bid/ask spreads that resulted in no trades with buy-side customers. The Dealer Defendants coordinated the strategic participation of one or two dealers in order to keep tabs on the SEFs, including which buy-side customers were trading on the platforms. The Dealer Defendants recognized that one or two dealers trading small amounts on Javelin (or TeraExchange or trueEX) would not be enough to help the platform gain a foothold in the market. RBS thus ensured that their participation on Javelin would not pose a threat to Defendants' conspiracy.

154. Although JP Morgan proclaimed interest in trading on Javelin, it was merely a ruse in order to collect information on its trading platforms. Simon Maisey, who was actively involved in the conspiracy as a board member of Tradeweb Markets Board of Directors and then as a Managing Director at Tradeweb itself, was JP Morgan's contact for the "negotiation," entertaining multiple meetings with Javelin personnel and burdening them with numerous pretextual requests for information. When Mr. Maisey was eventually pressed on whether JP Morgan had an interest in trading on the platform, he acknowledged that it did not.

155. On October 18, 2013, Javelin filed a "Made-Available-to-Trade" ("MAT") application with the CFTC that, if granted, would have mandated a wide range of cleared IRS to be executed on SEFs. Under Dodd-Frank, any type of swap transaction that the CFTC certifies as MAT on a SEF can no longer be traded through an unregulated swaps platform, but must instead be executed on a registered SEF or other CFTC-regulated platform.³³

³³ When forced to trade on a SEF with buy-side customers because a particular IRS has been MAT, the Dealer Defendants – consistent with their conspiracy – will only use SEFs that, like Tradeweb, effectively require buy-side customers to trade through an RFQ trading method.

156. Many participants in the IRS market expected mandatory trading on SEFs to result in “a real fundamental shift.”³⁴ As stated by Kevin McPartland, head of market structure research at Greenwich Associates: “It’s going to impact how the clients interact with the banks on a day-to-day basis.”³⁵

157. Javelin’s MAT submission infuriated the Dealer Defendants who wished to continue to trade swaps on dark, unregulated platforms where they hold all the advantages. The Dealer Defendants contested Javelin’s MAT submission through submissions by Morgan Stanley and trade groups serving the Dealer Defendants’ interests, such as the Securities Industry and Financial Markets Association.

158. A few days after Javelin’s MAT submission, RBS abruptly dropped its support for Javelin. Patrick Wegner, a senior IRS trader at RBS called James Cawley, the then-CEO of Javelin, to complain about the MAT submission. The bank immediately withdrew all of its liquidity from the platform.

159. In the days that followed, RBS mobilized to place enormous pressure on Javelin to retract its MAT submission to the CFTC. RBS enlisted Dawn Newsome, Adam Lister, Rich Volpe, Patrick Wegner, Darren Shames, and its legal counsel to pressure James Cawley to retract Javelin’s MAT application. On October 30th, 2013, less than two weeks later, Javelin filed another MAT submission, significantly narrowing the range of IRS instruments that would be mandated to trade on a SEF. Only then did RBS begin again providing Javelin with liquidity.

³⁴ Silla Brush, *CFTC Said Ready to Push Interest-Rate Swaps to Trade Venues*, BLOOMBERG (Jan. 9, 2014), <http://www.bloomberg.com/news/articles/2014-01-09/cftc-said-ready-to-push-interest-rate-swaps-to-trading-platforms>.

³⁵ *Id.*

160. On January 16, 2014, the CFTC certified Javelin's amended MAT submission. More than three years after Dodd-Frank became law, mandated trading of IRS on SEFs finally began on February 16, 2014, as a result of Javelin's investment in its SEF and its filing of the first MAT with the CFTC.

161. From that point on, however, RBS distanced themselves from Javelin. Management at Javelin was told to remove RBS from all of its marketing materials. James Cawley was told in no uncertain terms by Volpe, Head of IRS Trading at RBS, that Javelin was to never again mention to anyone that RBS was a market maker on its platform. Patrick Wegner, the senior trader responsible for providing electronic IRS markets on Javelin, began widening the bid/ask spreads he would stream to Javelin. RBS traders would also not respond to inquiries from the Javelin, even if it meant that RBS would be able to enter into an IRS transaction at a profitable level. Eventually, on April 26, 2015, RBS withdrew as a participant on Javelin's platform.

The Dealer Defendant FCMs Refused to Clear Trades Executed on Javelin

162. The Dealer Defendant FCMs also refused to provide Javelin credit checks necessary to clear trades, effectively preventing buy-side customers from using Javelin's order book. For example, on September 9, 2013, Javelin personnel met with Mark Millindorf of Deutsche Bank about connecting to the Deutsche Bank FCM. Mr. Millindorf stated that the legal department needed to approve Javelin's rulebook. Despite such assurances, Javelin heard nothing from Deutsche Bank for months. Following multiple inquiries by Javelin personnel, Millindorf finally responded in January 2014 that the legal department still had not reviewed the rulebook. By that time, seven buy-side customers that cleared trades via the Deutsche Bank FCM — FHLB Boston, NAB Asset Management, Blenheim Capital, Capstone Capital, Alphadyne Asset

Management, Wellington Management, and Canyon Partners — were waiting to trade on Javelin but could not do so because of Deutsche Bank’s refusal to connect its FCM to the platform.

163. The Deutsche Bank FCM utilized Traiana, Inc. as a credit hub to connect to various trading platforms. To try to expedite Deutsche Bank’s approval, Javelin tested its connection to Traiana, Inc. on January 27, 2014, and it successfully passed certification. Javelin immediately passed this information along to Mr. Millindorf, who described the development as “[g]reat.” The following day, Javelin personnel asked to test Javelin’s connection to Deutsche Bank, but Millindorf threw up a new roadblock, stating that “we don’t have any capacity to do this testing at the moment.” This was despite the fact that, as he later described it, testing the connection would be simple because “basically all we would do is put a limit on the Traiana UAT and watch orders come in and see it go down.”

164. Javelin thereafter followed up repeatedly with Millindorf about testing and the legal review. But he merely replied each time that the review was still ongoing. On March 3, 2014, Millindorf stated that the review “should be done by legal today.” But when Javelin personnel contacted Christine Burns of Deutsche Bank about testing the connection, she bluntly responded that Deutsche Bank was “not ready to conduct any testing at this time.”

165. Javelin followed up repeatedly with Millindorf over the next two weeks concerning the state of the legal review, receiving only radio silence until March 14, 2014, when he stated that the review was still not done. Javelin responded that several buy-side customers were ready to trade on Javelin but needed to be able to clear through the Deutsche Bank FCM. Millindorf responded that as soon as the legal department approved the rulebook, Deutsche Bank could connect to Javelin “at a flip of a switch.”

166. On March 26, 2014, Millindorf stated that the legal team had approved the connection to Javelin, and he just needed to “run it through our committees this week for approval.” Javelin personnel reached out to Ms. Burns later that same day about testing the connection, but she stated that the legal review was still not complete and would take another week. Consistent the pattern of delay, no approval was forthcoming over the following weeks. Deutsche Bank finally tested its connection to Javelin on April 30, 2014, and Burns stated that “[t]he Traiana pre-trade execution screening check was successful.”

167. On May 15, 2014, however, Paul Tartanella of Blenheim Capital Management tried to arrange trades on Javelin using the Deutsche Bank FCM, only to learn that Deutsche Bank still had not approved trading on Javelin. A Javelin executive contacted Millindorf later that same day to investigate the problem. He responded that, despite his prior assurances, the legal department review was still not complete, and in fact that “[a]s of right now our legal team is busy elsewhere (limited resources, various other things in the hopper) — right now it is on hold.” Millindorf’s excuse, which was directly contradictory to his prior representations, was plainly a pretext for Deutsche Bank’s refusal to clear trades executed on Javelin.

168. By this point, the writing was on the wall that Deutsche Bank would, under no circumstances, clear trades executed on Javelin. Javelin personnel again inquired as to the status of the bank’s review on December 15, 2014 — approximately fifteen months after Millindorf promised a quick review — and Millindorf responded: “No, no movement at the moment . . . Will certainly let you know. Right now we are on a status quo.”

169. Deutsche Bank never completed its purported review of Javelin and never approved clearing on Javelin for any of the bank’s customers, effectively preventing them from

using Javelin's platform. Javelin learned in its communications with Millindorf that Deutsche Bank was holding weekly meetings to discuss its strategy for responding to SEFs like Javelin.

170. Other Dealer Defendant FCMs, including those at Morgan Stanley, Barclays, and Goldman Sachs, made nearly identical claims as to the need to conduct reviews of Javelin. These drawn-out reviews were unnecessary and plainly pretextual given that FCMs do not enter into any agreements with Javelin and are not required to abide by Javelin's rulebook in clearing their customers' trades on Javelin. The sole issue for an FCM clearing a trade on Javelin is whether the FCM's customer (not Javelin) has sufficient credit for the trade. JP Morgan also used the pre-trade credit checks requirement to hinder customers, including Mitsubishi and Natixis, from trading on Javelin.

171. Javelin's interactions with Morgan Stanley provide another example of the roadblocks the Dealer Defendants set against clearing on Javelin. Javelin personnel reached out to the Morgan Stanley FCM on August 19, 2013, inquiring about clearing trades for the FCM's clients on Javelin. Erin Johnson, Vice President of Derivatives Clearing for Morgan Stanley, responded that the FCM would not connect to Javelin until one of its clients asked to trade on the platform. On September 23, 2013, Javelin personnel responded that a number of Morgan Stanley FCM clients — Nationwide Insurance, Annaly Capital, Nuveen Investments, Piper Jaffray, Hopwood Lane, and Huntington Bank— wanted to trade on Javelin but could not do so unless Morgan Stanley connected to the platform. Johnson did not reply.

172. Concerned that they were being stonewalled, Javelin personnel changed tactics and offered to demonstrate the Javelin platform's functionality for Johnson. Johnson agreed to view the demonstration but repeatedly delayed until a meeting finally occurred in January 2014. Despite a successful demonstration and the stated interest in Javelin of Morgan Stanley clients,

Morgan Stanley refused to approve credit to customers who attempted to trade on Javelin unless Javelin agreed to pay the untenably high cost of laying a direct data connection to Morgan Stanley. Morgan Stanley has never approved clearing for its clients on Javelin.

173. Because of the Dealer Defendant FCMs' conduct, many potential customers of Javelin simply could not clear trades executed on Javelin. Some Dealer Defendant FCMs went even further and actively pressured their customers not to trade on Javelin. For example, NISA Investment Advisors LLC ("NISA"), a large buy-side firm, was eager to trade on Javelin in August 2013. When Goldman Sachs, NISA's FCM, learned of this, Cassandra Tok of Goldman Sachs contacted John Choe of NISA and informed him that if NISA traded on Javelin, Goldman Sachs would withdraw all clearing services for the buy-side customer in any trading venue. Ms. Tok later informed Javelin that she and Mr. Choe jointly decided that NISA would no longer utilize Javelin's platform. Choe, however, later informed Javelin officials that he had been strongly encouraged by Goldman Sachs to step away from Javelin.

174. Subsequently, Javelin employees spoke to Mr. Smith of Goldman Sachs, and confronted him with Goldman Sachs' inappropriate refusal to clear trades for Javelin. Smith stated that if Goldman Sachs were somehow forced to clear trades for Javelin, it would simply set the credit limits for all of its customers who attempted to trade on Javelin at "zero," thereby preventing any of their trades from clearing. That is, Goldman Sachs' FCM was willing to forego clearing revenues and damage customer relationships in order to shut Javelin out of the market. Goldman Sachs also refused to clear trades executed on Javelin for its customer Babson Capital.

175. Similarly, after Citadel Fixed Income Master Fund executed a series of trades on Javelin between January 7, 2014 and April 4, 2014, the fund suddenly stopped trading on Javelin. Javelin later learned that Citadel's COO had said that Citadel stopped trading on Javelin

because he had received calls from representatives of the Dealer Defendants pressing him to do so.

176. The Dealer Defendants' refusal to provide credit checks to Javelin was not based on reasonable commercial concerns. For example, Deutsche Bank, Goldman Sachs, and Javelin were all connected to Traiana, a third-party pre-trade credit system owned by ICAP and many of the Dealer Defendants, and there was no additional risk to Deutsche Bank or Goldman Sachs in providing credit checks for Javelin through Traiana, just as Deutsche Bank and Goldman Sachs did with other trading platforms that did not offer meaningful all-to-all trading.³⁶

177. Despite the formidable obstacles erected by the Dealer Defendants, Javelin was able to generate some trading volume and by September 2014 had signed up nearly 80 entities to trade on its platform. However, as a result of FCM obstruction and Dealer Defendant threats, few customers were able actually to execute trades on the platform.

178. Even those customers that did execute trades eventually abandoned Javelin's platform due to the Dealer Defendants' actions. Mitsubishi, for example, repeatedly attempted to trade on Javelin, but ultimately ceased all activity. When asked why they had stopped trading on Javelin, a Mitsubishi trader informed Javelin that they had been pressed by JP Morgan, their FCM, against using Javelin.

Buy-Side Customers Fear Name Give-Up

179. In October 2014, buy-side interest in Javelin and other all-to-all trading platforms

³⁶ Traiana, is jointly owned by ICAP and Dealer Defendants Bank of America, Barclays, Citigroup, Deutsche Bank, JP Morgan, and RBS. Luke Jeffs, *ICAP sells stake in Traiana to seven investment banks*, REUTERS (Jan. 14, 2013), <http://www.reuters.com/article/icap-banks-traiana-idUSL6N0AJAEU20130114>. The Dealer Defendant FCMs used their control over Traiana to discriminate against all-to-all SEFs, such as TeraExchange, by posting high credit limits for client trades on dealer-friendly SEFs, such as Tradeweb, while posting a credit limit of zero for all-to-all platforms. This effectively prevented the FCMs' clients from trading on the all-to-all platforms.

collapsed when buy-side customers learned that all-to-all trades were not sure to be anonymous. Many buy-side firms initially explored all-to-all trading through aggregator platforms that streamed all-to-all quotes from multiple SEFs, including IDBs and Javelin.³⁷ The buy-side found aggregators useful because they provided a consolidated view of the market and access to greater all-to-all liquidity. However, this interest in aggregator use quickly subsided when buy-side customers realized that aggregators were far from anonymous. This became clear as news spread that Compagnie Financière Tradition, SA (“Tradition”), a dealer-friendly IDB, had contacted Mitsubishi to complain about Mitsubishi’s use of Tradition’s order-book platform, Trad-X, after an aggregator had routed a Mitsubishi trade to that platform

The Dealer Defendants’ Boycott Effectively Shut Down Javelin

180. Meanwhile, the Dealer Defendants continued pressuring Javelin. In the fall of 2014, Javelin contemplated submitting a second MAT filing to increase the number of IRS products required to be traded on SEFs like Javelin. As industry studies noted, the Dealer Defendants increasingly avoided trading IRS on SEFs by shifting from standard IRS trades that had been MAT and were required to be traded on SEFs to roughly equivalent non-standard IRS that had not been MAT and were not required to be traded on SEFs.³⁸ For example, a standard five-year IRS trade that had been MAT could be switched to a 61-month trade to avoid a SEF. Javelin’s contemplated MAT filing sought to limit this practice.

181. A Javelin executive met with executives from many of the Dealer Defendants to discuss the proposed submission. The Dealer Defendants all responded coldly. For instance,

³⁷ A group within UBS developed one of the aggregator platforms. UBS’s trading desk and clearing group nonetheless continued to participate in the conspiracy to boycott all-to-all trading platforms.

³⁸ See Mike Kentz, *Buysiders avoid SEFs with non-standard swaps*, INT’L FIN. REVIEW (Sept. 5, 2014), <http://www.ifre.com/buysiders-avoid-sefs-with-non-standard-swaps/21161979.fullarticle>; Tod Skarecky, *Forward Start and Backward Start Swaps?*, CLARUS FIN. TECH. (July 29, 2014), <https://www.clarusft.com/forward-start-and-backward-start-swaps/>.

when the Javelin executive went to meet with Deutsche Bank regarding the submission, he was met by a Deutsche Bank executive on the sidewalk in front of the bank's New York office building. The Deutsche Bank executive suggested that they go for a walk instead of meeting in his office. During the walk, the Deutsche Bank executive told the Javelin executive to drop the new MAT submission and advised the Javelin executive that he would "never work" on Wall Street again if Javelin went through with the filing.

182. As a result of the Dealer Defendants' boycott, Javelin today effectively has no revenues and facilitates no IRS trading. Despite years of development and millions of dollars in investment capital, Javelin has executed less than 180 trades since its launch.

183. The Dealer Defendants' joint opposition to Javelin was coordinated. For example, Javelin employees had numerous conversations with representatives of the Dealer Defendants in which the representatives proffered nearly identical excuses for their refusal to deal, pointing in particular to a supposed lack of customers on the Javelin platform.

184. In fact, these excuses were entirely pretextual, given that the Dealer Defendants had gone to great lengths to ensure that potential customers did not trade on Javelin. As noted above, Javelin had committed liquidity providers by September 2013, guaranteeing that the Dealer Defendants would have counterparties to trade with, and Javelin's platform frequently featured IRS prices that were competitive with or better than, those of rival platforms like Tradeweb. The real reason for the Dealer Defendants' collective refusal to deal was their unlawful agreement to boycott any platform that threatens to open an all-to-all trading platform to the buy-side.

B. The Dealer Defendants Boycotted TeraExchange

185. Much like Javelin, TeraExchange expended immense resources to develop an anonymous all-to-all electronic trading platform. By 2011, TeraExchange was actively soliciting

support for its platform by demonstrating its utility to many buy-side customers and dealers, including Dealer Defendants. But the Dealer Defendants effectively destroyed TeraExchange in a well-orchestrated and effective campaign to drive it from the marketplace. In their own words, the Dealer Defendants viewed TeraExchange as a “Trojan Horse” — if its platform was able to succeed, the Dealer Defendants’ privileged position in the marketplace would be severely threatened.

The Dealer Defendants Seek to Take Over TeraExchange and Shut it Down

186. After learning of TeraExchange’s plans for its SEF, the Dealer Defendants conducted secret meetings, including under the cover of Tradeweb, to discuss how to neutralize this threat. One tactic they agreed upon was to replicate what they had done with Tradeweb — the Dealer Defendants would jointly “invest” in TeraExchange, under the pretense of offering it more capital, but with the real goal of taking it over and shutting it down.

187. Several of the Dealer Defendants sought meetings with TeraExchange under the guise of exploring trading on TeraExchange. TeraExchange readily agreed as it hoped to secure Dealer Defendants’ support. At a series of meetings in early 2013, however, TeraExchange had strikingly similar experiences with these banks: TeraExchange personnel would walk into a meeting expecting to meet with the head of IRS trading to discuss the bank signing up for the TeraExchange platform, but instead would be met by personnel from the bank’s strategic investment group offering to take a stake in TeraExchange itself.

188. For example, TeraExchange executives visited Goldman Sachs having been led to believe they would be meeting with members of the bank’s IRS trading desk. Upon arrival, however, the TeraExchange personnel were brought to meet with Brad Levy and Kimberly Trautmann of Goldman Sachs’ Principal Strategic Investments group, a group within Goldman

(discussed in further detail below) focused on controlling market evolution for the benefit of the Dealer Defendants. They claimed that Goldman Sachs wanted to invest in TeraExchange and asked to learn more about its platform. In fact, Goldman Sachs had no real intention of supporting TeraExchange. Instead, Goldman Sachs was attempting to buy control of TeraExchange to ultimately shut down its platform in order to maintain the bifurcated IRS market desired by the Dealer Defendants. Similar bait and switch tactics were pulled by the strategic investment groups of Barclays, Bank of America (Shea Wallon attended), Credit Suisse, Citi (William Hartnett attended), Deutsche Bank, and Morgan Stanley.

The Dealer Defendants Refuse to Trade on TeraExchange

189. While the Dealer Defendants claimed an interest in supporting TeraExchange in these meetings, in fact not one of them agreed to sign up for TeraExchange's platform. TeraExchange talked with senior employees at each of the Dealer Defendants on numerous occasions to discuss trading or providing liquidity to the TeraExchange platform, but none offered to trade on, or provide liquidity to, TeraExchange.

190. TeraExchange's business plan did not, however, depend on signing up the Dealer Defendants as liquidity providers in the first instance. Instead, TeraExchange focused on attracting non-traditional liquidity providers to make markets on its platform, including large proprietary trading firms that were members of the FIA Principal Traders Group (such as Allston Trading; Chicago Trading Company; Chopper Trading LLC; DRW Holdings, LLC; Geneva Trading USA, LLC; HTG Capital Partners; IMC Chicago LLC; Jump Trading LLC; KCG Holdings; Liquid Capital; Marquette Partners, LP; Optiver US LLC; Spot Trading LLC; Sun Trading, LLC; Teza Technologies; Tower Research Capital, LLC) and other large trading institutions.

191. While many of these entities were historically considered to be on the buy-side, they were increasingly serving as liquidity providers in various other asset classes and trading at large volumes. TeraExchange recognized that members of the FIA Principal Traders Group were natural early adopters of TeraExchange's platform because they understood its value proposition and represented large portions of the volume in equity, currency, and futures trading at the time. These entities were ready, willing, and able to provide the liquidity to the TeraExchange platform that would allow the platform to thrive.

192. TeraExchange recognized that these non-traditional liquidity providers had different trading strategies from those of the Dealer Defendants. They usually engaged in high-volume trading strategies involving little warehousing of risk, which made them largely risk neutral. These entities were more eager than traditional dealers to trade IRS more quickly and were willing to quote bid/ask spreads at levels that were designed to be immediately executable. As a result, these entities were generally willing to trade IRS at tighter bid/ask spreads than traditional dealers — something which would greatly benefit the buy-side by lowering the price of IRS trades.

193. TeraExchange understood that once tighter bid/ask spreads became available on its platform, other market participants would join the platform to take advantage of the spreads and the ease of execution on an all-to-all order book. TeraExchange was confident that market participants, seeing the many advantages of trading on its all-to-all platforms, would demand that swap dealers trade with them on the platform to achieve the same tight bid/ask spreads. This is because most customers demand that their dealers engage in a practice known as “best execution,” which refers to a trading entity's duty to secure the best price available when executing a trade as the agent of a customer. Best execution typically requires a dealer to take all

reasonable steps to obtain the best possible result for customers when executing orders.

TeraExchange believed that swap dealers, including the Dealer Defendants, would follow client demand for best execution and bring their own liquidity to the platform. Indeed, this is what would have occurred in a competitive market.

194. TeraExchange met with hundreds of market participants, many of which committed to using the platform. These included, Susquehanna International Group, LLP; Annaly; Mizuho Bank, Ltd.; DRW Holdings, LLC; and AQR Funds, among others. These entities carried out successful tests of TeraExchange's technology on their trading interfaces.

The Dealer Defendant FCMs Refused to Clear Trades Executed on TeraExchange

195. The Dealer Defendants became increasingly concerned as market participants committed to TeraExchange's platform. They recognized that if the platform succeeded, their privileged status as market makers in a bifurcated market would be imperiled. Accordingly, they took additional steps to collectively sabotage TeraExchange, including using Dealer Defendant FCMs to block trades executed on TeraExchange and threatening customers who used TeraExchange with the loss of liquidity in IRS or in other products. As this occurred, representatives from numerous Dealer Defendants informed personnel at TeraExchange that its platform would never succeed.

196. As they did with Javelin, the Dealer Defendants used their FCMs to block trades executed on TeraExchange by refusing to clear the trades or quoting outrageously high fees that would make the transactions uneconomic, despite clearing similar trades for the same customers on other IRS platforms for reasonable fees.

197. Senior personnel from TeraExchange attempted to convince the FCMs to stop this abuse, but they ran into numerous brick walls. When, for instance, TeraExchange met with Bob

Burke, the head of clearing for Bank of America, Burke said: “My bosses are never going to let me [clear trades for TeraExchange].”

198. HSBC’s FCM similarly gave TeraExchange the runaround for over a year before finally refusing to clear for the platform. During this time, Julianna Salazar, Vice President of Futures & OTC Clearing for HSBC’s FCM, required approximately half a dozen demonstrations of TeraExchange’s trading platform and its connectivity to HSBC’s FCM in the course of her consideration of whether HSBC’s FCM would connect to TeraExchange. Despite repeated successful demonstrations, Ms. Salazar refused to give a direct answer on whether HSBC would clear its customers’ trades on the platform. At the end of nearly eighteen months, Ms. Salazar finally told TeraExchange that HSBC would not sign on as a clearing member without approval from the IRS trading desk — approval that was never given.

199. Ray Kahn, Global Head of Futures Clearing & Americas Head of Agency Derivative Services at Barclays, told TeraExchange that Barclays could not establish trade clearing for TeraExchange because it was “resource constrained.” This was an obvious pretext, since clearing trades from TeraExchange required minimal resources, and Barclays performed similar services for customers using other SEFs. Many other Dealer Defendants used the same “resource constrained” pretext to avoid setting up clearing on TeraExchange, including Deutsche Bank, Morgan Stanley, and Credit Suisse.

200. The FCMs of other Dealer Defendants also refused to clear trades for TeraExchange. For instance, ANZ Bank cleared its trades through FCMs at Citi and Bank of America. When ANZ asked Citi to clear trades executed on TeraExchange, Chris Perkins, the head of clearing at Citi, informed ANZ that it would not clear trades executed on TeraExchange’s platform. Perkins said that Citi would only clear ANZ trades executed directly

with Citi's trading desk (which refused to use TeraExchange). The Citi FCM would normally have feared losing business by denying a customer in this way, since Citi knew that ANZ could clear through the Bank of America FCM. But due to the Dealer Defendants' boycott conspiracy, Citi had nothing to fear since no FCM would clear TeraExchange trades. In fact, ANZ was never approved to trade on TeraExchange by any Dealer Defendant FCM.

201. The FCMs took steps to obscure the true nature of their boycott. For example, at times, they would not refuse to clear any trades executed on TeraExchange outright. Instead, they would quote extremely high clearing fees for trades executed on TeraExchange, while quoting far lower fees for clearing trades on other Dealer Defendant-friendly platforms. For example, when Knight Capital Group tried to trade on TeraExchange's platform, executives at the Bank of America FCM told Knight Capital and TeraExchange that Bank of America would only clear trades executed on TeraExchange at an excessive fee far above what the FCM charged customers to clear trades on dealer-to-customer OTC or RFQ platforms, thus effectively precluding Knight Capital from trading on TeraExchange.

202. Observing the barriers that the Dealer Defendants had put into place, other market participants began to waver in their support for TeraExchange's platform. Susquehanna International Group, LLP, for instance, withdrew its commitment to the platform.

203. Despite these formidable obstacles, TeraExchange executed and cleared the first IRS trade on its platform on June 13, 2014. The transaction was between Annaly and Mitsubishi for a notional amount of \$10 million. The trade was cleared through the CME clearinghouse by BNPP's FCM affiliate.

204. The collective response from the Dealer Defendants to the first IRS trade on TeraExchange was immediate. Upon observing that buy-side customers were trading on

TeraExchange's order book, the BNPP FCM notified the bank's trading desk of the transgression. The desk then contacted the parties to the transaction and threatened them with a loss of access to clearing and other banking services if they continued to trade on TeraExchange. Indeed, BNPP threatened not only loss of access to clearing, but also execution services in other asset classes and general market research. Word of BNPP's threat spread to other buy-side firms and led those firms to avoid TeraExchange.

205. The next business day after the trade, BNPP, Citi, JPM, and UBS all told TeraExchange that they would not clear any trades executed on TeraExchange until they conducted an audit of TeraExchange's rulebook, like Javelin's, a largely standardized document that the CFTC had already reviewed and commented on prior to granting it temporary SEF registration. Other Dealer Defendants later similarly blocked trading on TeraExchange for purported rulebook reviews that have never been completed.

206. Because all of the Dealer Defendant FCMs refuse to clear trades executed on TeraExchange, all of those FCMs' customers, including non-traditional liquidity providers, cannot clear trades executed on TeraExchange. Consequently, the June 13, 2014 trade between Annaly and Mitsubishi was the last IRS trade to be executed and cleared on TeraExchange's platform.

207. In July 2014, BNPP reached out to Annaly asking that Annaly "abstain from executing on Tera while they resolve some operational issues on their end related to trades executed on Tera." However, there were no operational issues, and BNPP provided no additional information.

208. Throughout this period, the Dealer Defendant FCMs were clearing trades for those same buy-side firms executed on Bloomberg's and Tradeweb's dealer-to-customer RFQ

platforms. But, as described above, there is no legitimate reason for an FCM to discriminate among SEFs because the FCM's risk comes from the trading customer itself, not the platform on which the trade is executed.

209. The Dealer Defendants also became even more vocal in their opposition to TeraExchange following the June 13, 2014 trade on TeraExchange. As a result, many buy-side customers became concerned about meeting with TeraExchange for fear of reprisal from their FCMs. One buy-side customer, for instance, expressed a fear that "JP Morgan knew" it was meeting with TeraExchange.

210. The Dealer Defendants' collective boycott of TeraExchange starved it of the liquidity it needed to succeed. Absent the Dealer Defendants' boycott, buy-side firms and other liquidity providers would have traded on TeraExchange's platform.

The Dealer Defendants' Refuse to Let TeraExchange "Off the Mat"

211. As it was attempting to attract dealers and the buy side to its platforms, TeraExchange simultaneously employed an additional business strategy focused on providing smaller IDBs with access to its SEF services to meet and satisfy Dodd-Frank requirements for certain IRS instruments, but the Dealer Defendants shut down this strategy as well.

212. From its own experience, TeraExchange realized that building and gaining approval of a SEF was a difficult and expensive proposition for many of these IDBs. TeraExchange offered these smaller IDBs the opportunity to execute their trades through the TeraExchange SEF for a fee, rather than expending the resources to register themselves as SEFs. TeraExchange hoped this alternative business plan would provide it with sufficient revenue to continue developing its primary all-to-all trading business.

213. Several smaller IDBs responded positively to the proposal, recognizing that the use of TeraExchange's platform was necessary to their survival. Nearly a dozen smaller IDBs entered into agreements with TeraExchange, including RP Martin, OTCex, Cloud9, GMG Brokers, Sunrise Brokers, LLC, and Continental Capital Markets. If TeraExchange had been able to move forward with these IDBs, then it would have been able to grow its business and eventually expand offerings to the buy-side.

214. The IDBs, however, had, as a practical matter, to obtain the consent of the dealers using their platforms, including the Dealer Defendants. In striking parallel, the Dealer Defendants universally refused to give such consent. For example, in February 2014, Laura Martin of Citi informed OTCex that "per internal policy" Citi would not allow OTCex to use TeraExchange, claiming that "Citi is not currently signed onto the Tera SEF Rulebook." After OTCex pointed out that Citi did not need to join TeraExchange or sign onto its rulebook (which was, in any event, approved by the CFTC), Ms. Martin responded by saying that Citi's refusal to allow IDBs to execute trades on TeraExchange was "more of an internal policy rather than a regulatory one," essentially confirming that there was no valid basis for Citi's refusal. And she informed OTCex that co-conspirator ICAP was Citi's "preferred solution."

215. As a whole, the Dealer Defendants took a uniform position that they would not allow IDBs to execute trades on TeraExchange. The reason became clear when multiple Dealer Defendants in various communications informed the IDBs and even TeraExchange personnel that they saw the TeraExchange platform as a "Trojan Horse," and that they did not want to let TeraExchange "off the mat." As this terminology used by separate Dealer Defendants in separate communications demonstrates, the Dealer Defendants collectively saw TeraExchange (as well as Javelin and other electronic all-to-all trading platforms) as a threat to their privileged position in

the marketplace. They were determined to stop this threat and, through their aggressive joint actions, have effectively done so.

216. As Peter McCarthy, the CEO of ED&F Man Capital Markets, one of the smaller IDBs that hoped to work with TeraExchange, informed TeraExchange's CEO during a lunch in midtown Manhattan, the Dealer Defendants would simply not allow ED&F Man to sign up with TeraExchange.

217. As a result, no IDB has been able to process a trade through TeraExchange's order book, and some, including ED&F Man Capital Markets, have since left the IRS business. Despite this universal boycott, smaller IDBs have continued to express interest in processing trades through the TeraExchange platform.

218. Faced with the Dealer Defendants' boycott, TeraExchange has effectively left the IRS market. Despite years of development and millions of dollars in investment capital, only one IRS trade has been executed on TeraExchange since its launch.

C. The Dealer Defendants Similarly Boycotted Other All-to-All Trading Platforms

219. There are striking similarities between the Dealer Defendants' conduct in jointly boycotting Javelin and TeraExchange, and their conduct in jointly boycotting other trading platforms seeking to offer all-to-all trading platforms, such as trueEX.

220. In 2013, trueEX sought to bring to market a SEF offering an IRS electronic all-to-all trading platform open to both buy- and sell-side entities. TrueEX was founded by Sunil Hirani, who had previously started and operated a successful electronic trading platform for CDS for an IDB called Creditex.

221. TrueEX was among the first swaps all-to-all platforms to be approved by the CFTC.³⁹ It offered “trading features, such as anonymous trading, that regulators and traders at funds say will encourage smaller banks and other players, such as hedge funds, to enter the market as dealers[, which] will help increase competition, reduce prices for customers, and decrease risk in derivatives markets.”⁴⁰ TrueEX “took a very old way of executing and brought it into the 21st century,” which allows a trader to “execute a portfolio of swaps electronically in a very efficient manner.”⁴¹

222. With these features and Mr. Hirani’s background in electronic CDS trading, TrueEX was ready and able to become a successful all-to-all trading platform for IRS. Hirani publicly stated that the platform had signed up 62 buy-side participants, explaining that “[c]learly the buy-side demand is there.”⁴²

223. The Dealer Defendants, however, boycotted trueEX by refusing to trade IRS with buy-side customers on trueEX’s order book. Were a buy-side customer to execute a trade on the order book, it would have to clear the trade through one of the Dealer Defendant FCMs, which would then alert the dealer of the transgression. The dealer would in turn pressure the customer for accessing the “forbidden” platform.

³⁹ Glen Fest, *TrueEX Takes Early Lead in Building Rate Swaps Exchange*, AM. BANKER (Apr. 1, 2013), http://www.americanbanker.com/magazine/123_4/Swaps-Sequel-1057473-1.html.

⁴⁰ Levinson, *supra* note 2.

⁴¹ Aaron Timms, *TrueEx Builds Bridges in the New World of Swaps*, INSTITUTIONAL INVESTOR. (July 21, 2015), <http://www.institutionalinvestor.com/article/3472545/asset-management-regulation/trueex-builds-bridges-in-the-new-world-of-swaps.html#.Vk5RPk3ltaQ>.

⁴² Levinson, *supra* note 2.

224. Today, trueEX, like Javelin and TeraExchange, facilitates few trades in the IRS market.⁴³ The Dealer Defendants do provide some limited liquidity to trueEX's non-anonymous, dealer-to-customer RFQ platform, which uses protocols that effectively replicate OTC trading.⁴⁴ To ensure the platform does not reach critical trading mass, however, the Dealer Defendants collectively refuse to trade plain vanilla swaps — which trade in the highest volumes across the IRS market — with end users on trueEX. A study by Clarus Financial Technology (“Clarus”) found that in 2015 trueEX's platforms accounted for 0% of plain vanilla swaps trading.⁴⁵

225. Instead, the Dealer Defendants only transact with the buy side on trueEX's platform in bespoke, one-off swaps, which trade in significantly smaller volumes. The Dealer Defendants otherwise only conduct “termination” and “compression” transactions on the platform. Termination transactions are merely unwinds of already existing trades, and “compression” trades — which merely consolidate multiple offsetting trades into one position — are done mainly to reduce regulatory capital and margin requirements associated with offsetting swap positions. No bid/ask spread is associated with “compression” trades, so trueEX's execution of those trades does not threaten the Dealer Defendants. In sum, the Dealer Defendants have successfully neutralized trueEX from becoming a competitive threat.

D. The Dealer Defendants Deter Buy-Side Customers From Trading on Javelin, TeraExchange, and Other All-to-All Trading Platforms

226. The Dealer Defendants also conspired to block all-to-all trading of IRS by discouraging their customers from using all-to-all trading platforms such as Javelin and

⁴³ Timms, *supra* note 41.

⁴⁴ See Ivy Schmerken, *Start-Up SEF Taking the Fight to Incumbents*, TABB FORUM (Feb. 26, 2015), <http://tabbforum.com/opinions/start-up-sef-taking-the-fight-to-incumbents>.

⁴⁵ Amir Khwaja, *2015 SEF Market Share Statistics*, Clarus Financial Technology (Jan. 26, 2016), <https://www.clarusft.com/2015-sef-market-share-statistics/>.

TeraExchange. The Dealer Defendants discourage their customers by withholding all clearing services to their customers who attempt to trade on anonymous all-to-all platforms, insisting on post-trade disclosure practices to discourage anonymous all-to-all trading, and even putting their customers in a “penalty box” in an attempt to discourage future transgressions.

227. These acts, which the Dealer Defendants did in concert, are designed to make all-to-all trading unattractive to customers and, in some cases, to scare them from attempting to disrupt the OTC market. “[T]his meaningfully disincentivizes [dealer-to-customer] SEFs from making any changes that may receive retaliation from the biggest dealer banks. As a result, there is little opportunity for ‘organic’ market evolution to occur in such a deeply anti-competitive marketplace.”⁴⁶

1. *The Dealer Defendants withhold clearing services to buy-side firms that attempt to trade on Javelin, TeraExchange, and other all-to-all platforms*

228. The Dealer Defendants conspired to dissuade firms from trading on Javelin, TeraExchange, and other all-to-all SEFs by threatening them with the complete withdrawal of clearing services or across-the-board increases in clearing fees that make IRS trading cost prohibitive.

229. Because clearing performs an important risk mitigation function for many IRS, denial of clearing services effectively hamstring the buy-side’s ability to trade IRS. Therefore, the mere possibility that the Dealer Defendants can, through their FCMs, cut off access to clearing is sufficient to deter many buy-side customers from even attempting to trade on all-to-all platforms.

230. The Dealer Defendant FCMs are able to coordinate their activities because, among other things, their clearing operations communicate regularly with each other. For

⁴⁶ KELLEHER, ET AL., *supra* note 20, at 12.

example, Piers Murray, the Global Head of Fixed Income Prime Brokerage at Deutsche Bank, used to work as the Global Head of Rates Clearing at JP Morgan.⁴⁷ Mr. Murray regularly communicates with his counterparts at other Dealer Defendants, such as Bob Burke, Co-Head of Bank of America's Global Futures and Derivatives Clearing Services, and Michael Dawley, the head of Goldman Sachs' FCM.

231. For example, in July 2015, certain of the Dealer Defendant FCMs, including those of Barclays, BNPP, Credit Suisse, and JP Morgan, began jointly penalizing certain buy-side firms that were pushing against the bifurcated market structure by hiking their clearing fees "by as much as ten-fold," while obedient buy-side customers "have been protected."⁴⁸ In a competitive market, the Dealer Defendant FCMs would compete with each other to provide clearing services to their customers. Instead, the FCMs of Bank of America, Barclays, BNPP, Credit Suisse, JP Morgan, and others collectively threatened to raise or actually raised clearing fees for certain buy-side firms in retaliation for their attempts to trade on Javelin, TeraExchange, and other all-to-all anonymous SEFs. Absent collusion, the FCMs would not collectively target the same buy-side firms with higher fees, while keeping fees uniform for other market participants.

232. The Dealer Defendants' conduct is strikingly consistent. The head of rates at a high-frequency trading firm "noticed ... indirect push-back," including that "one dealer ... put the brakes on talks to clear for the firm."⁴⁹ The clearing talks "just stalled" after the dealer

⁴⁷ Matt Cameron, *Deutsche snares JP Morgan's Murray for clearing role*, RISK (July 2, 2012), <http://www.risk.net/risk-magazine/news/2188410/deutsche-snares-jp-morgan-s-murray-clearing-role>.

⁴⁸ Peter Madigan, *FCMs try to "off-board" credit and commodity funds*, RISK (July 30, 2015), <http://www.risk.net/risk-magazine/feature/2419614/fcms-try-to-off-board-credit-and-commodity-funds>.

⁴⁹ *Id.*

learned that the buy-side firm “wanted to start acting as a market-maker on Sefs.”⁵⁰ “A number of other sources at hedge funds and proprietary trading firms” encountered similar “resistance from their dealers.”⁵¹ Several buy-side firms have told “similar stories.”⁵²

233. The Dealer Defendants’ ability to prevent clearing has blocked market entry for Javelin, TeraExchange, and other all-to-all anonymous trading platforms. Without access to clearing, buy-side firms and second-tier dealers cannot trade on such platforms and are forced to trade on dealer-friendly SEF RFQ platforms like Tradeweb that retain the inefficient dealer-to-customer trading structure of the OTC market.

2. *The Dealer Defendants insist on “name give-up” to deter buy-side participation on all-to-all platforms*

234. The Dealer Defendants have agreed to insist on “name give-up” in order to discourage buy-side participation on all-to-all trading platforms. Name give-up refers to the practice of identifying the names of each counterparty to an IRS to the other. Buy-side firms and independent SEFs have widely decried this practice because, “[i]n practice, in a SEF environment, this unnecessary disclosure of swap counterparties only serves to inform the dealers of the non-dealer firms [or] banks that are attempting to trade on their platforms, and invit[es] retaliation.” Name give-up thus serves as a policing mechanism because it allows the Dealer Defendants to determine which trading platforms abide by the Dealer Defendants’ unwritten rules.

235. The Dealer Defendants know that name give-up effectively deters end users from utilizing all-to-all trading platforms. Specifically, name give-up causes uncontrolled

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² Rennison, *supra* note 4.

“information leakage” in that end users must reveal their trading positions, and thus elements of their trading strategies, to both dealers and other end users, who may be able to exploit that information against them.

236. Many end users go to great lengths to keep their trading strategies confidential. As Ken Griffin, founder of Citadel, has explained, name give-up allows dealers unfairly to “position their book by taking advantage of their trading counterparties’ market insights.”⁵³ Michael O’Brien, Director of Global Trading at Eaton Vance, has stated: “I don’t want to show the size of my trades, I don’t want people to know how I’m trading. Information is the most valuable asset we have.”⁵⁴ Similarly, Richard Mazzella, Chief Operating Officer for Global Fixed Income at Citadel has stated: “Forcing end-users to disclose themselves if they are in a [order book] is a means to discourage alternative market participants from participating in what were historically interdealer [order books.]”⁵⁵

237. There is great demand from the buy-side for all-to-all, anonymous trading.⁵⁶ As a result, “[s]ome asset managers have claimed their use of [order books] will increase if they are

⁵³ Kris Devasabai, *Citadel’s Ken Griffin on Amazon, Bloomberg and Swap Market Reform*, RISK (Oct. 31, 2014), <http://www.risk.net/risk-magazine/profile/2377762/citadels-ken-griffin-on-amazon-bloomberg-and-swap-market-reform>.

⁵⁴ Levinson, *supra* note 2.

⁵⁵ Madigan, *supra* note 22 (O’Brien: “I would like my desk to be executing any trades possible on central limit order books”).

⁵⁶ See Rennison, *supra* note 4 (quoting Sam Priyadarshi, head of fixed income derivatives at Vanguard Asset Management, as stating “[w]e have a deep desire to be able to access these markets”); *id.* (quoting Marc Vesecky, Chief Risk Officer for Tower Research Capital, as stating “Tower is definitely supportive of swap trading moving toward open, efficient electronic trading”); *id.* (quoting the Chief Risk Officer of a large hedge fund as stating: “I might have an interest in being a liquidity provider. We already have people on our team who can do that and we are interested in showing bids and offers to the market both for our own portfolio and to take advantage of pricing discrepancies”).

allowed to trade anonymously.”⁵⁷ Richard Mazzella explained that “removing these barriers is important in allowing” a true order book to come to market.⁵⁸ Ken Griffin noted that “anonymous markets foster competition,” adding that “[i]t should not matter who provides the best price.”⁵⁹ And George Harrington, CFA, Global Head of Fixed Income, Currency, and Commodity Execution at Bloomberg LP stated during a panel discussion at SEFCON on October 26, 2015 that there is “a good deal of demand for anonymous trading” for cleared swaps.

238. For instance, if an order book transaction closes with a dealer on one side, that dealer is able immediately to see if a buy-side participant (a) was allowed access to the order book, and (b) had the audacity to try to capitalize on that access by entering into a transaction over the order book rather than in the dealer-to-customer OTC (or, more recently, dealer-to-customer RFQ) systems. And because the Dealer Defendants are the primary liquidity providers to the market, they are likely to be the counterparties in most trades with buy-side customers, even on an all-to-all trading platform, meaning that they are able to quickly identify any buy-side customer trading on such a platform.

239. Name give-up should not continue to exist in the IRS market. Name give-up is a historical artifact, and, because IRS trades conducted on SEFs are now centrally cleared, there is no legitimate justification for maintaining the practice on SEFs. Neutral commentators, regulators, and even the Dealer Defendants’ employees agree as much.

⁵⁷ Peter Madigan, *Massad: Sefs fear retaliation if they end name give-up*, RISK (Apr. 23, 2015), <http://www.risk.net/risk-magazine/news/2405534/massad-end-users-shut-out-from-sefs-due-to-post-trade-name-give-up>; see also Robert Mackenzie Smith, *Bank Swaps Headlock Slips as Chicago Prop Firms Join Sefs*, RISK (Aug. 6, 2015), <http://www.risk.net/risk-magazine/feature/2420554/bank-swaps-headlock-slips-as-chicago-prop-firms-join-sefs> (quoting the head of fixed income at a principal trading firm as stating: “If volume moves more towards Clob[s], [order books], then that’s where we’ll get more engaged”).

⁵⁸ Madigan, *supra* note 21.

⁵⁹ Devasabai, *supra* note 53.

240. For instance, Declan Graham of UBS admitted as much during a panel discussion at SEFCON on October 26, 2015, noting that name give-up on order books is pointless for cleared swaps. During a prior SEFCON panel, Rana Chammaa, executive director of FRC Execution Sales at UBS, acknowledged that customers are “sitting on the sidelines because they [IRS platforms] still maintain post-trade order give-up.”⁶⁰

241. CFTC Chairman Timothy Massad has said he is “very concerned” about name give-up for “trades taking place on a central limit order book that are then immediately cleared,” and that he has “not heard a compelling justification” for the practice of name give-up in today’s IRS market.⁶¹ Mr. Massad explained that the CFTC had “heard market participants express concern about potential negative consequences of this practice with respect to its effects on liquidity and participation” and he had “not heard a compelling justification” for the practice of name give-up in today’s IRS market.⁶² Richard Mazzella, Chief Operating Officer for Global Fixed Income at Citadel noted, “[i]f you are trading in [an order book] where you are pre-trade anonymous then you should also be post-trade anonymous . . . [W]hen you cut through the arguments for post-trade disclosure, it’s really just a means to discourage people from participating in the [order book].”⁶³ And former CFTC Commissioner Mark Wetjen has stated

⁶⁰ Ivy Schmerken, *Swap Markets Debate Anonymous Trading in SEFs*, WALL ST. & TECH. (Jan. 5, 2015), <http://www.wallstreetandtech.com/trading-technology/swap-markets-debate-anonymous-trading-in-sefs/d/d-id/1318257>.

⁶¹ Madigan, *supra* note 57. The CFTC does not police secret, horizontal collusion between direct competitors in the IRS or any other market. Moreover, the CFTC Chairman has recently stated that the CFTC has no plans to combat name give-up. *See CFTC not planning on anonymity for swaps market*, FIN. TIMES (Oct. 26, 2015), <http://www.ft.com/fastft/414101/us-swaps-market>.

⁶² Remarks of Chairman Timothy Massad Before the ISDA 30th Annual General Meeting (Apr. 23, 2015), <http://www.cftc.gov/PressRoom/SpeechesTestimony/opamassad-17>

⁶³ Madigan, *supra* note 22.

publicly that it is “difficult to rationalize trading protocols that reveal the identities of counterparties on an anonymous, central limit order book.”⁶⁴

242. Although central clearing eliminated all legitimate reasons for requiring name give-up, the Dealer Defendants recognized its importance in maintaining market bifurcation. Specifically, Brad Levy of Goldman Sachs, Stephen Wolff of Deutsche Bank, and Dexter Senft of Barclays and Morgan Stanley, among others, conspired to keep the practice in place by making their Defendant Dealers’ provision of liquidity to a trading platform conditional on the use of the practice. The remainder of the Dealer Defendants thereafter joined the agreement.

243. Pursuant to their agreement, the Dealer Defendants collectively boycotted any trading platform, including Javelin and TeraExchange, that refused to include name give-up as a feature. In fact, executives from the Dealer Defendants expressly said they would consider Javelin’s order book, but only if it included name give-up.

244. The Dealer Defendants also ensure that name give-up persists through a service known as MarkitWire, which is operated by MarkitSERV. MarkitSERV is dominated by the Dealer Defendants: Brad Levy (formerly of Goldman Sachs’ Principal Strategic Investments group) is currently the CEO of MarkitSERV, and Stephen Wolff (formerly the Head of Interest Rate Trading at Deutsche Bank) is the Head of Group Corporate Strategy at Markit. MarkitWIRE itself is run by Chip Carver, who previously managed fixed income derivatives trading for Goldman Sachs and was responsible for the bank’s E-Commerce for global interest rate products.

245. MarkitWire is a trade processing service for IRS and other asset classes offered by MarkitSERV, meaning it delivers trades to clearinghouses once they have been executed by

⁶⁴ See *Remarks of Commissioner Mark Wetjen before the Cumberland Lodge Financial Services Policy Summit*, CFTC (Nov. 14, 2014), <http://www.cftc.gov/PressRoom/SpeechesTestimony/opawetjen-10>.

counterparties. While it is possible to design IRS trading platforms to feature “straight-through processing” — where a trade is immediately sent to a clearinghouse by a SEF once it is executed — the Dealer Defendants force IDBs to send trades to MarkitWire *before* they are cleared.⁶⁵ MarkitWire then offers the counterparties to an IRS transaction a “last look” at the trade, where they learn each other’s identities and have the option to terminate the transaction. This process is inefficient and more cumbersome than electronic all-to-all trading, and it subjects the parties to unnecessary post-trade name give-up.⁶⁶ Javelin’s platform, for instance, has the capability to execute trades and send them to the clearinghouse directly while maintaining full anonymity.

246. The IDBs only use MarkitWire, and disclose the names of the parties to an IRS transaction post-trade, because the Dealer Defendants collectively insist that they do so. Buy-side firms have complained that this practice “is applied to please dealers and that it discourages non-banks from trading, helping to preserve the traditional market structure in which dealer-to-client and interdealer markets were separate.”⁶⁷

247. As a result of collective pressure from the Dealer Defendants, numerous SEFs agreed to impose name give-up on their platforms. Today, the largest IDB SEFs — BGC, DealerWeb, GFI, ICAP, IGD, Tullet Prebon, and Tradition — all maintain name give-up, thereby effectively preventing buy-side customers from trading on them.⁶⁸ These entities

⁶⁵ See Peter Madigan, *CFTC to clamp down on delays in swap clearing*, RISK (Aug. 5, 2015), <http://www.risk.net/risk-magazine/feature/2420436/cftc-to-clamp-down-on-delays-in-swap-clearing>.

⁶⁶ *Id.* (citing a CFTC staffer as stating: “It is not uncommon for it to take more than an hour for counterparties to agree [to] a trade confirmation on affirmation platforms such as Markitwire”). During a recent SEFCON panel discussion, Declan Graham of UBS stated that the lack of straight-through processing delays trade processing and clearing by up to six hours.

⁶⁷ *Id.*

⁶⁸ See *Top of the Swaps*, RISK (Nov. 2014), https://www.citadelsecurities.com/_files/uploads/sites/2/2014/12/Ken-Griffin-Risk-Magazine-Top-Of-The-Swaps-November-2014.pdf (noting that dealer-run platforms feature name give-up).

recognize the collective power of the Dealer Defendants, and, as an employee of Tradeweb explained, are careful about “not biting the hand that feeds you.”⁶⁹

248. When Tradition launched its IDB order book platform, Trad-X, in 2011, it made sure to include name give-up. As a result, the Dealer Defendants supported the platform, meaning that while they boycotted the anonymous all-to-all SEF order books open to the buy-side, they jointly supported an order book open only to themselves.

249. The Dealer Defendants even touted the benefits of order book trading of IRS, while neglecting to note that they had conspired to save those benefits for themselves alone. Christian Mundigo, Global Head of Rates Trading and Co-Head of Americas Fixed Income at BNPP, for instance, stated that “BNP Paribas believes Trad-X will provide the USD swap market with an efficient electronic execution venue for trading interest rate swaps. We are pleased to support the expansion of this market leading platform across both the Euro and USD markets, where we are committed to be strongly engaged with both the dealer community and our clients.”⁷⁰ Elie El Hayek, Managing Director, Global Head of Rates Global Banking and Markets at HSBC stated “HSBC is very pleased to support the launch of Trad-X in USD interest rate swaps. Trad-X has proved the concept of a hybrid solution with deep liquidity in EUR swaps and we look forward to continue to be a key player in an industry initiative in the US that brings transparency and trade certainty to the market.”⁷¹

⁶⁹ Mike Kentz, *New dawn as non-bank enters interdealer order book*, INT’L FIN. REV. (July 18, 2014), <http://www.ifre.com/new-dawn-as-non-bank-enters-interdealer-order-book/21154986.article>.

⁷⁰ TRADITION, *Trad-X launches USD Interest Rate Swaps*, http://www.trad-x.com/media/2939/trad-x_launches_usd_interest_rate_swaps.pdf (last visited Dec. 9, 2016).

⁷¹ *Id.*

250. Ciaran O’Flynn, Managing Director Global Head of Rates eTrading at Morgan Stanley, commented that “Morgan Stanley is committed to supporting execution of swaps trading on electronic venues like Trad-X. These venues increase the transparency of the swaps market and facilitate the move towards mandatory clearing.”⁷² Christopher Murphy, Global Head of Rates & Credit at UBS, added: “UBS is very pleased to be supporting the launch of Trad-X in USD interest rate swaps. We believe that Trad-X brings a compliant, transparent solution for interest rate swap trading along with deep and firm liquidity. We hope that the launch in USD will build on the success of Euro interest rate swaps.”⁷³

251. Name give-up is an effective deterrent to the buy-side’s use of all-to-all platforms. As described above, when Mitsubishi traded IRS on Trad-X via an aggregator, its identity was disclosed and it immediately received a phone call from Tradition complaining about Mitsubishi’s use of the Trad-X platform. The IDBs and Dealer Defendants thus work together to ensure that buy-side firms are not trading on IDB platforms. As a direct consequence of maintaining name give-up, “[t]o date, volumes on the few order-book platforms built by SEFs have been underwhelming to the point of invisibility.”⁷⁴

252. Paul Hamill, formerly employed by UBS and currently the Global Head of Fixed Income, Currencies, and Commodities for Execution Services at Citadel, echoed this sentiment, stating that electronic trading platforms without anonymity “can arguably be seen as a

⁷² *Id.*

⁷³ *Id.*

⁷⁴ Timms, *supra* note 41.

disincentive for customers to put liquidity into the platform.”⁷⁵ CFTC Chairman Timothy Massad has said that numerous “[i]nvestors have complained that they are unable to break into the interdealer markets because they are not anonymous — with names given up after trading.”⁷⁶ Indeed, one U.S.-based hedge fund manager stated that “[e]nding name give-up on broker Sefs [would] remove[] the ability for dealers to effect retribution on their clients.”⁷⁷

253. Market data confirms that all platforms on which IRS are traded in any significant volume impose name give-up. Clarus reports daily trading volume for each SEF, and each SEF is categorized as either a “D2C” (dealer-to-customer) or “D2D” (dealer-to-dealer) SEF.⁷⁸ As shown in the chart below, approximately 98% of what Clarus considers D2C trading volume occurs on either Tradeweb or Bloomberg. Trading on these two platforms occurs exclusively through a dealer-to-customer RFQ protocol with post-trade name give-up.⁷⁹

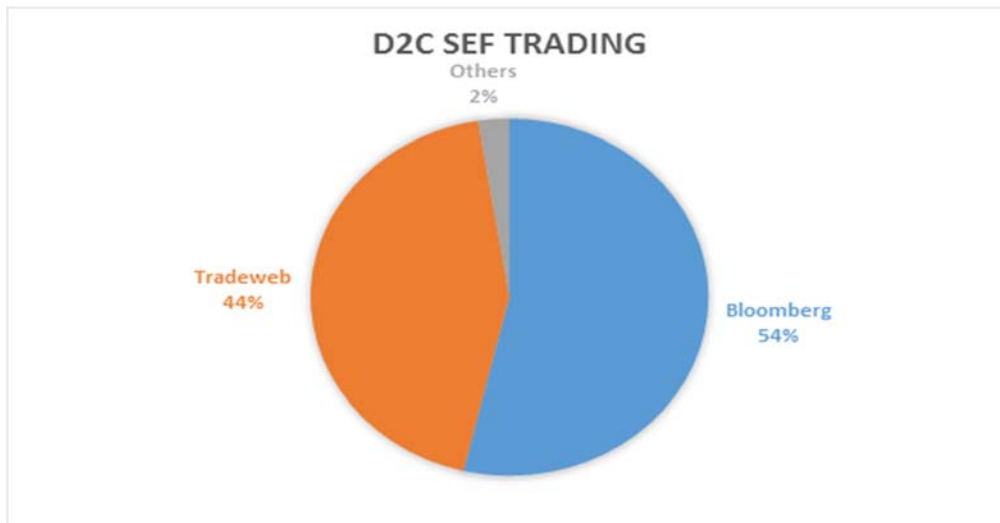
⁷⁵ *SEFs Win Qualified Praise*, MARKETS MEDIA (Oct. 8, 2013), <http://marketsmedia.com/sefs-win-qualified-praise/>.

⁷⁶ *CFTC not planning on anonymity for swaps market*, *supra* note 61.

⁷⁷ Rennison, *supra* note 4.

⁷⁸ The data below comes from Clarus SEFView, *Data for 02/16/2016 – 02/22/2016*.

⁷⁹ This chart shows that the Dealer Defendants have maintained the market share of Dealerweb, the interdealer SEF owned and operated by Tradeweb, at a very low level — merely 2%. This reflects the fact that the Dealer Defendants are — jointly — rewarding the IDBs for keeping the buy side off their platforms. At the same time, the Dealer Defendants maintain Dealerweb as a nascent threat to those IDBs. The IDBs know that, at any time, the Dealer Defendants could, in lockstep, move their liquidity to Dealerweb, as they had done in the mortgage bond market — the event that led to the détente between the Dealer Defendants and ICAP. Dealerweb poses significant operational costs to Tradeweb, and the minimal trading on the platform means that Tradeweb (and thus the Dealer Defendants) is operating the platform at a significant loss. They are only willing to suffer these losses because Dealerweb serves an important role in their overall conspiracy.

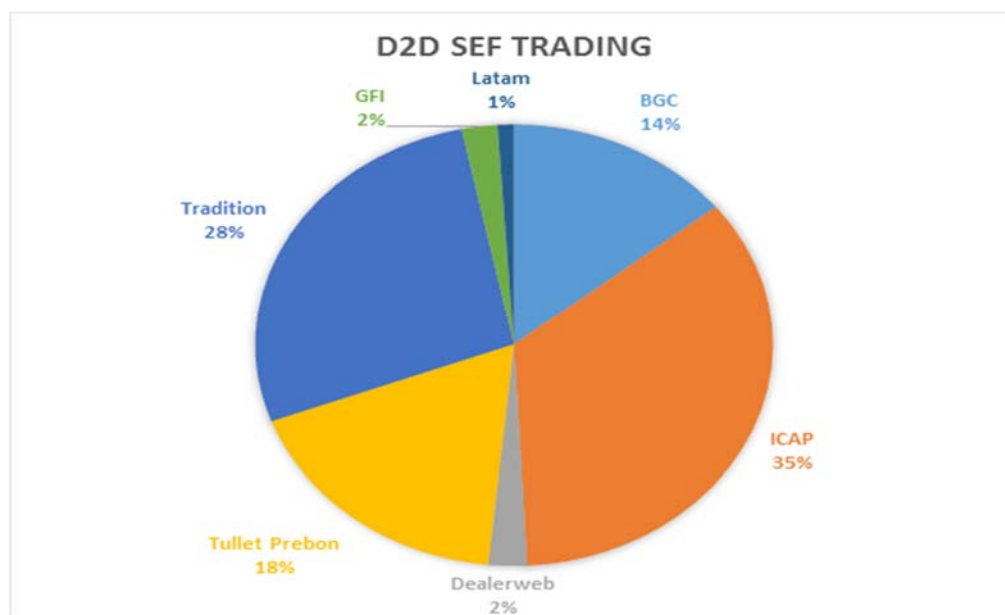


254. While Bloomberg nominally offers an order book platform as required by CFTC regulations to operate as a SEF,⁸⁰ this platform sees virtually no IRS activity because Bloomberg does not promote it, the Dealer Defendants refuse to trade on it, and buy-side firms fear they will face retaliation from the Dealer Defendants if they use it. As with Tradeweb’s order book, buy-side customers cannot trade on Bloomberg’s all-to-all platform without being found out because they have to clear their trades through Dealer Defendant FCMs.

255. Bloomberg also offers a pricing screen by the name of “All-Q,” where dealers can post executable prices for end users. This screen, however, does not allow end users to post prices or trade with each other, and trading via the screen is not anonymous. As a result, Bloomberg constrains end users to the same OTC-like trading available on Tradeweb.

⁸⁰ Dodd-Frank requires that all SEFs operate and offer an order book for trading. The law permits SEFs to also offer an RFQ platform in conjunction with the order book. Bloomberg and Tradeweb offer both platforms, but, as a result of Defendants’ conspiracy, the buy side effectively only has access to the RFQ platforms. In addition, both Bloomberg and Tradeweb limit their RFQ platforms to dealer-to-client trading functionality, meaning that end users cannot trade with each other on these platforms.

256. The dealer-to-dealer side of the market is also dominated by SEFs that have agreed to play by the Dealer Defendants’ rules. *None* of the dealer-to-dealer SEFs allow anonymous trading.⁸¹



257. As this data shows, there is virtually no IRS trading today that is anonymous. This alone is powerful evidence of Defendants’ collusion because there is no legitimate reason for name give-up to persist in a centrally cleared IRS market.

3. *The Dealer Defendants place transgressors in the “penalty box”*

258. At the same time the Dealer Defendants collectively prevent all-to-all SEFs from succeeding, they themselves use identical platforms. Tradeweb and a number of IDBs, including ICAP, operate such SEF trading platforms with order book functionality, but they are open only to dealers.

⁸¹ As shown in the chart in text below, the Dealer Defendants have maintained the market share of Dealerweb, the interdealer SEF owned and operated by Tradeweb, at a very low level — merely 2%. This reflects the fact that the Dealer Defendants are — jointly — rewarding the IDBs for complying with their demands that IDB platforms remain off-limits to the buy side. At the same time, the Dealer Defendants maintain Dealerweb as a nascent threat to those IDBs. The IDBs know that, at any time, the Dealer Defendants could, in lockstep, move their liquidity to Dealerweb, as they had done in the mortgage bond market — the event the led to the détente between the Dealer Defendants and ICAP.

259. There is no technical reason why these entities could not allow buy-side customers to trade on their platforms as well, but the Dealer Defendants pressure them not to allow this. In fact, the Dealer Defendants have “threaten[ed] to withdraw liquidity from any trading platform that admits buy-side firms onto its [order book].”⁸² Such a practice is commonly referred to as being placed in “the penalty box.”

260. The Dealer Defendants pull liquidity from platforms that allow anonymous trading. For example, when an interdealer SEF “run by GFI Group said it would allow anonymous trading, several banks threatened to pull their business off the platform.”⁸³ In particular, GFI “received heated phone calls from executives at Credit Suisse Group AG and J.P. Morgan Chase” over the introduction of trade anonymity.⁸⁴ The complaining banks, which had planned to use GFI to trade with other banks, “contended that allowing *nonbanks* to trade anonymously could hurt their ability as swaps providers.”⁸⁵ In the face of this pressure, GFI promptly reversed course and implemented name give-up. GFI’s story is a well-known example of what happens to brokers that try to implement anonymous trading.

261. As a former IDB employee explained, when the IDB attempted to bring buy-side customers onto its trading platform in a different asset class, the Dealer Defendants discovered this through name give-up and responded with collective threats “to simply move their business

⁸² Madigan, *supra* note 57.

⁸³ Levinson, *supra* note 2.

⁸⁴ Katy Burne, *CFTC to Propose Swaps Anonymity*, WALL ST. J. (Feb. 16, 2015), <http://www.wsj.com/articles/cftc-to-propose-swaps-anonymity-1424132424>.

⁸⁵ *Id.* (emphasis added).

to another broker.”⁸⁶ He stated that, as a result, the IDB relented, limiting its platform to dealers. The employee added: “We didn’t have much choice but to shut it down.”⁸⁷

262. When asked during a recent panel discussion at SEFCON why the manner in which buy-side firms trade has not evolved in the wake of Dodd-Frank, Scott Fitzpatrick, the CEO of Tradition’s SEF, bluntly explained that IDB SEFs were not willing to stand up to dealers and go anonymous because of the risk of a loss of liquidity.

263. The Dealer Defendants similarly threaten any buy-side customer with being put in the “penalty box” if it attempts to trade on an all-to-all trading platform, whether it is operated by an IDB or an independent SEF like Javelin or TeraExchange.⁸⁸ In such instances, the Dealer Defendants often refuse to trade with the buy-side customer in any venue. Because the Dealer Defendants are the primary market makers in the IRS market, such a boycott effectively prevents the buy-side customer from trading IRS as long as it is in the penalty box. In even more egregious circumstances, the Dealer Defendants collectively threaten a transgressing customer with withdrawal of key banking services and refusal to trade other products. This intimidation is very effective at maintaining the status quo, in which every buy-side trade must be executed on an inefficient retail market, ensuring that the Dealer Defendants take a hefty toll on every transaction.

⁸⁶ Robert Mackenzie Smith, *Interdealer brokers need to change, say critics*, RISK (Sept. 14, 2015), <http://www.risk.net/risk-magazine/feature/2424954/risk-interdealer-rankings-2015-sector-needs-more-change-say-critics>.

⁸⁷ *Id.*

⁸⁸ See Rennison, *supra* note 4 (quoting a U.S.-based hedge fund manager: “In interest rate swaps, we have been given strong signals by our dealers that they would be annoyed if we, as a buy-side firm, showed up in the interdealer platforms.”).

264. The Dealer Defendants also use the “penalty box” to prevent any non-compliant dealer from breaking ranks, and will refuse to trade with anyone who is suspected of supporting all-to-all trading.

265. For example, in 2003, Barclays attempted to launch a rudimentary, single-dealer electronic trading platform for IRS called “BARX” by partnering with Bloomberg.⁸⁹ The other Dealer Defendants promptly put Barclays in the “penalty box” and refused to allow Barclays to participate in multi-dealer consortia, such as Tradeweb, for several years.

266. BARX eventually ended its IRS business and became devoted mainly to foreign exchange (“FX”) trading. Even then, Barclays was only allowed out of the “penalty box” and into the Dealer Defendants’ clubhouse in 2008, when Barclays acquired the assets and personnel of the swaps business of Lehman Brothers, including Dexter Senft, who possessed deep connections with the other Dealer Defendants and went on to bring those relationships and that network to Morgan Stanley in 2010. This acquisition significantly bolstered Barclays’ share of the IRS market, and Mr. Senft used his connections to help Barclays ingratiate itself with the other Dealer Defendants, including by taking a stake in Tradeweb.⁹⁰ Senft similarly used his connections to maintain Morgan Stanley’s involvement in the conspiracy after he joined in 2010.

E. The Dealer Defendants’ Conduct Has Chilled Market Progress

267. The Dealer Defendants’ boycotts have sent a message to the industry that *any* SEF platform attempting to offer the buy-side access to an anonymous all-to-all trading platform

⁸⁹ See *Bloomberg and Barclays Capital launch interest rate swaps trading*, FINEXTRA (July 21, 2003), <https://www.finextra.com/news/fullstory.aspx?newsitemid=9515>.

⁹⁰ TRADEWEB, *Barclays Capital Takes Equity Stake in Tradeweb* (Sept. 10, 2009), <http://www.tradeweb.com/news/news-releases/barclays-capital-takes-equity-stake-in-tradeweb/>.

would be collectively boycotted and crushed, and any buy-side partners would be punished through a denial of trading services and an imposition of excessive clearing fees.

268. As Angela Patel, Trading Operations Manager at Putnam Investments, a buy-side customer, stated during a recent SEFCON panel discussion: “No one wants to do anything because no one wants to be the next person to piss everyone off.”

269. SEFs are afraid even to apply to make IRS “available to trade” (and buy-side firms are afraid to trade IRS on all-to-all trading platforms) because of the risk of collective retaliation by the Dealer Defendants as happened to Javelin.

270. Stephen Berger, the Director of Government Affairs at Citadel, similarly noted at SEFCON that a “market discipline element . . . is there in the background.” Certain employees of the Dealer Defendants, such as Michael Dawley, Managing Director and Co-Head of Futures and Derivatives Clearing Services at Goldman Sachs, make direct threats to SEFs in order to enforce market discipline. In 2014, for example, at least one IDB SEF received a threatening phone call from Mr. Dawley after the SEF hired an employee who was perceived as hostile to the Dealer Defendants.

271. As a result, the Dealer Defendants have effectively deterred any entities from offering anonymous all-to-all trading to the buy-side.

IV. DEFENDANTS’ OTHER EFFORTS TO BLOCK ALL-TO-ALL TRADING OF INTEREST RATE SWAPS

A. The Dealer Defendants Took Control of Tradeweb to Prevent the Development of a More Competitive Trading Platform

272. Javelin and TeraExchange were not the very first trading platforms for IRS. By early 2008, Tradeweb was poised to introduce an electronic all-to-all trading platform to the IRS market — a development that the marketplace should have embraced. Instead, the Dealer Defendants acted in concert to neutralize the threat Tradeweb posed.

1. *The Dealer Defendants' Strategic Investment Groups Took Control of Tradeweb's IRS Business*

273. Tradeweb was founded 1998 as a private, dealer-backed firm that provided an online marketplace for fixed-income products, such as U.S. Treasuries. Tradeweb subsequently developed a dealer-to-customer RFQ platform for IRS upon which buy-side customers could (non-anonymously) request non-executable and non-binding quotes from dealers, but not from other end users. This was, in other words, an OTC platform that facilitated the Dealer Defendants' roles as the sole IRS market makers. Because Tradeweb's platform relied on the dealers to make markets, its success depended on the dealers providing liquidity to the platform.

274. In 2004, the dealers sold Tradeweb to what was then Thomson Corp., counting upon Tradeweb's dependence on the dealers' liquidity to keep it under their effective control. IRS trading volumes thereafter continued to grow. With the increased demand for IRS and advances in trade documentation, IRS products became increasingly standardized and, as discussed above, IRS quickly evolved to the point where the IRS market was poised and ready for the introduction of all-to-all electronic trading.

275. Recognizing the threat the market evolution to all-to-all IRS trading posed to the Dealer Defendants' collectively privileged position as the primary market makers, Goldman Sachs' Principal Strategic Investments group devised a "dealer consortium" strategy to work with its biggest competitors, *i.e.*, the other Dealer Defendants, to maintain control of the IRS market. The Goldman Sachs PSI group was organized principally to control how markets would evolve in order to protect the "dealer community" from the threat of all-to-all trading that would, in the banks' own phraseology, "disintermediate" them as dealers.⁹¹

⁹¹ See generally Liz Moyer, *Goldman Group Takes Stakes in Market Evolution*, MarketWatch (Jan. 23, 2012), <http://www.marketwatch.com/story/goldman-group-takes-stakes-in-market-evolution-2012-01-23>

276. Having experienced the migration of other financial instruments away from OTC trading — and having seen the loss of bank revenues resulting from that migration — the Goldman Sachs PSI group recognized that, if the IRS market shifted to all-to-all platforms, buy-side customers would be able to trade directly with one another, thereby diminishing the substantial profits the Dealer Defendants derive from trades in the dealer-to-customer market.⁹²

277. Many of the other Dealer Defendants employ similar “strategic investment” groups to coordinate with their competitors to control market structures.⁹³ Bank of America’s group, Global Strategic Capital Initiatives, was headed by Mary Harman from 2009 to 2015. Barclays employs a group known as Market Strategic Investments, which is headed by Andrew Challis.⁹⁴ Citi’s strategic investments group was headed by William Hartnett until his recent departure. Credit Suisse’s practice is known as the Strategic Principal Investments Group and was run by Theofilos Kotridis and Alan Freudenstein for most of the past decade.

278. Deutsche Bank utilizes a group called Strategic Investments, which was headed by Stephen Wolff from 2004 to 2014, when he was succeeded by Andrew Murray. JP Morgan’s Strategic Investments Group, headed by Luis Valdich, “co-invest[s] with other strategic

(noting that “PSI and its portfolio have rarely attracted outside scrutiny, mostly because the group’s existence isn’t publicized”).

⁹² See, e.g., Adam Sussman, *US Interest Rate Swap Futures: Why Market Participants Would Switch*, TABB GROUP (2012), <http://www.cmegroup.com/education/files/tabb-strong-prospects-for-interest-rate-swap-futures.pdf> (“[T]here is little doubt in our minds that dealers want to preserve the traditional swaps market for as long as possible.”).

⁹³ Philip Georgiadis & Tim Cave, *Strategic investment units driving the evolution of trading*, FIN. NEWS (Mar. 31, 2015), <http://m.efinancialnews.com/story/2015-03-31/banks-strategic-investment-units-drive-the-evolution-of-trading> (“While most bulge-bracket banks have principal strategic investment units, US investment banking giants dominate the space and Goldman Sachs, in particular, is widely viewed as one of the largest and most organised.”).

⁹⁴ Luke Clancy, *Tough Times for the Real Masters of the Universe*, RISK (Sept. 26, 2016), <http://www.risk.net/risk-magazine/feature/2471879/tough-times-for-the-real-masters-of-the-universe>.

investors, including banks and market structure firms” to “gain and sustain competitive advantage by developing and executing principal strategic investments.”⁹⁵ Morgan Stanley’s group, also called the Strategic Principal Investments Group, was led by Gary Offner from 2005 to 2016.⁹⁶ Those Dealer Defendants without distinct market strategy groups, such as BNPP, conduct similar strategic activities through their trading businesses. As discussed in more detail below, personnel in these divisions regularly communicate with their counterparts at other Dealer Defendants to ensure that the dealers are acting in a coordinated fashion.

279. The Dealer Defendants are “intensely secretive” about their strategic investment groups.⁹⁷ They did not typically even disclose the groups’ existence, and they kept their operations hidden from public scrutiny.⁹⁸ When one publication attempted to research these groups in 2015, all ten banks approached refused to discuss their groups on the record.⁹⁹

280. The members of these groups understand themselves to constitute a so-called “dealer community” that controls how markets evolve. The heads of these groups met with each other regularly, and secretly, in person and by telephone and through electronic communications, to discuss how to protect the Dealer Defendants’ role as dealers and maintain an artificially bifurcated IRS market. They also collaborated closely with the respective heads of their IRS trading desks.¹⁰⁰

⁹⁵ Georgiadis & Cave, *supra* note 93.

⁹⁶ Clancy, *supra* note 94.

⁹⁷ *Id.*

⁹⁸ *Id.*; Moyer, *supra* note 91.

⁹⁹ See Georgiadis & Cave, *supra* note 93.

¹⁰⁰ *Id.*

281. These groups secretly collaborated to protect what they called the “dealer community” or the “industry.” For these groups, protecting the “dealer community” means protecting their privileged status in markets they have historically controlled. As explained by a recent article in the financial press, triggered in part by the scrutiny brought to these groups by this lawsuit and a prior lawsuit involving CDS, these groups long collaborated in a manner “enabling them to influence the speed and direction of change in the markets where they made a fat slice of their revenues.”¹⁰¹

282. As stated in another recent article, the result of this collaboration is that: “When change happened, it did so with the blessing of the industry.”¹⁰² That same article quotes an unnamed source from one of the banks as “ruefully” acknowledging how that collaboration restricted market growth and development: “We were too slow to change; too closed. *There was too much control.*”¹⁰³

283. Tradeweb is a prime example of where the Dealer Defendants exercised too much control to prevent the market from developing. By late 2007, Tradeweb was planning to introduce electronic all-to-all trading to the IRS market — a development for which there was great demand from the buy side. Tradeweb touted itself as a “real-time trading platform” and boasted it was “well positioned to capture new business as the market migrates to more efficient electronic trading platforms.”¹⁰⁴

¹⁰¹ Clancy, *supra* note 94.

¹⁰² Duncan Wood, *Swaps market mutation could replace managed change*, RISK (Oct. 3, 2016), <http://www.risk.net/risk-magazine/opinion/2472646/swaps-market-mutation-could-replace-managed-change>.

¹⁰³ *Id.*

¹⁰⁴ See TRADEWEB, *Thomson to Acquire TradeWeb* (Apr. 8, 2004), <http://www.tradeweb.com/News/News-Releases/Thomson-to-Acquire-TradeWeb/>.

284. In response to this perceived threat, the Dealer Defendants resolved to regain control of Tradeweb to prevent it from introducing all-to-all trading. In late 2007, Brad Levy of Goldman Sachs, Stephen Wolff of Deutsche Bank, and Dexter Senft of Lehman Brothers (later of Barclays and Morgan Stanley), all members of their respective dealers' strategic investment groups, devised and implemented a scheme to eliminate the threat from Tradeweb.

285. Messrs. Levy, Senft, and Wolff recognized that Tradeweb's liquidity contracts with the Dealer Defendants — which Tradeweb needed in order to drive volume to its RFQ and eventually its all-to-all platform — were expiring. This provided the Dealer Defendants with leverage. According to one source, "Thomson realized the banks would take their liquidity and shop it around, which would threaten the value of TradeWeb."¹⁰⁵

286. To exploit this leverage, Levy, Senft, and Wolff recruited other Dealer Defendants to join an initiative they named "Project Fusion." Project Fusion was designed as a way for the Dealer Defendants to take control of Tradeweb's IRS business so as to eliminate Tradeweb as a threat — and to do so secretly.

2. *The Dealer Defendants and Tradeweb Hid the True Nature of the Dealer Defendants' Acquisition of Control*

287. On October 1 and 2, 2007, the Dealer Defendants and Tradeweb privately formed two Delaware LLCs within 24 hours. They named the first one "Tradeweb Markets LLC." This was the entity intended to be the public face of the deal and the one in which the Dealer Defendants really would take a minority stake in exchange for paying \$180 million to Thomson Corporation, the parent of Tradeweb at the time. The Dealer Defendants created a second company named "Tradeweb NewMarkets LLC." This entity was conceived and created with one

¹⁰⁵ Ivy Schmerken, *Thomson Plans to Spin Off Tradeweb*, WALL ST. & TECH. (Oct. 10, 2007), <http://www.wallstreetandtech.com/trading-technology/breaking-news-thomson-plans-to-spin-off-tradeweb/d/d-id/1258992>.

central purpose: to give the Dealer Defendants control over IRS trading at Tradeweb. The Dealer Defendants paid Thomson Corporation approximately \$280 million to purchase an *overwhelming majority stake* (80%) in this entity, and it was this entity that would house Tradeweb's IRS business.

288. On October 11, 2007, Tradeweb and the Dealer Defendants issued a press release announcing that “the dealers will invest approximately \$180 million to purchase a *minority stake* in TradeWeb's established markets.”¹⁰⁶ This press release was plainly meant to convey to the financial press and others that this minority investment included Tradeweb's *interest rate swaps business*. For example, after mentioning the “minority” investment of \$180 million, the press release went on to state:

The dealers that have agreed to invest in TradeWeb are: Credit Suisse, Deutsche Bank, Goldman Sachs, JPMorgan, Lehman Brothers, Merrill Lynch, Morgan Stanley, The Royal Bank of Scotland, and UBS. All nine firms have committed to participate in TradeWeb's markets, *including interest rate swaps*, providing a significant opportunity for institutional investors to benefit from the efficiencies of electronic trading.¹⁰⁷

289. Elsewhere in the release, Lee Olesky, President of Tradeweb, emphasized *IRS trading* as the chief benefit of the Dealer Defendants' supposed minority stake: “At this stage in the evolution of the electronic markets, *especially interest rate swaps*, the partnership of leading dealers with TradeWeb's global distribution and technology, is a powerful combination.”¹⁰⁸

¹⁰⁶ TRADEWEB, *Nine Global Dealers and Thomson Financial Form Premier Electronic Trading Venture Using TradeWeb* (October 11, 2007) (emphasis added), <http://www.tradeweb.com/News/News-Releases/Nine-Global-Dealers-and-Thomson-Financial-Form-Premier-Electronic-Trading-Venture-Using-TradeWeb>.

¹⁰⁷ *Id.* (emphasis added).

¹⁰⁸ *Id.* (emphasis added).

290. Nowhere did Defendants' press releases mention the existence of the newly-created entity, Tradeweb NewMarkets LLC, that would house Tradeweb's IRS business, or that the Dealer Defendants' were paying approximately \$280 million to control 80% of that entity. At most, those crucial facts were addressed, and deliberately obscured, only by one vague sentence, which conveyed no meaningful information at all: "Separately, Thomson and the dealers will fund additional investment in asset class expansion."¹⁰⁹

291. The press releases were misleading about the *purpose* of the Dealer Defendants' investment. As noted, they claimed the Dealer Defendants were investing in Tradeweb's IRS business to provide "a significant opportunity for institutional investors to benefit from the efficiencies of electronic trading."¹¹⁰ In fact, the Dealer Defendants' purpose was to keep Tradeweb from offering an all-to-all platform that would be *more efficient* for the buy side.

292. When Citi joined the Tradeweb consortium in April 2008, Tradeweb and the Dealer Defendants issued another misleading press release, reading: "TradeWeb announced today that Citi is acquiring *a minority stake in the company*, and will obtain a seat on its Board."¹¹¹ Nowhere did the release mention that the Dealer Defendants (now including Citi) owned 80% of the Tradeweb NewMarkets LLC responsible for Tradeweb's IRS business.

293. As explained more fully below, Goldman Sachs and the other Dealer Defendants originally did not allow Barclays to participate in the Tradeweb consortium because they had placed Barclays in the "penalty box" for attempting to launch a dealer-to-customer IRS

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ TRADEWEB, *Citi Takes Equity Stake in Tradeweb* (Apr. 8, 2008), <http://www.tradeweb.com/News/News-Releases/Citi-Takes-Equity-Stake-in-Tradeweb/>. Bank of America also became an investor in 2008, after it acquired Merrill Lynch.

electronic trading platform without the other dealers' permission. When Barclays' "penalty" expired, and the Dealer Defendants allowed it to become an investor in Tradeweb in 2009, the Dealer Defendants again issued a press release stating that Barclays had joined the other dealers in taking "a *minority* equity stake in its business," again neglecting to mention the Dealer Defendants' overwhelming *majority* stake in Tradeweb NewMarkets LLC.¹¹²

294. As part of Project Fusion, certain Dealer Defendants (Bank of America, Barclays, Citi, Credit Suisse, Deutsche Bank, Goldman Sachs, JP Morgan, Morgan Stanley, RBS, and UBS) agreed with each other that Tradeweb would not move forward with an all-to-all trading platform and that they would not support other trading platforms that threatened to move the market toward all-to-all trading. They also agreed that each Dealer Defendant would provide liquidity to Tradeweb's platforms to the exclusion of competing platforms.

3. *The Dealer Defendants Installed Themselves on Tradeweb's Boards and Committees and Use Their Positions to Further the Conspiracy*

295. The Dealer Defendants installed their senior personnel, including those principally responsible for the conspiracy alleged herein, on the boards of both Tradeweb Markets and Tradeweb NewMarkets. The Dealer Defendants' personnel occupied 16 of the 26 seats on the Tradeweb Markets Board of Directors and 16 of the 24 seats on the Tradeweb NewMarkets Board of Directors. The Dealer Defendants also installed key strategic personnel on the governance committees of both entities, so they could control Tradeweb's IRS business strategy and use the entities secretly to collude.

¹¹² WALL ST. & TECH., *Barclays Capital Takes Minority Equity Stake in Tradeweb*, (September 11, 2009), <http://www.wallstreetandtech.com/electronic-trading/barclays-capital-takes-minority-equity-stake-in-tradeweb/d/d-id/1262406>.

296. The Dealer Defendants installed one of the chief architects of their consortium strategy, Vic Simone, a Managing Director at Goldman Sachs and then-Global Head of its PSI Group, as Chairman of the Board of Directors of Tradeweb Markets.¹¹³ And they selected Lee Olesky, the former Chief Operating Officer for Fixed Income at Credit Suisse, to serve as CEO of both entities.

297. Bank of America installed Shea Wallon, a Managing Director in the bank's Global Strategic Capital Initiatives group, on the Boards of both Tradeweb Markets and Tradeweb NewMarkets. Other Bank of America personnel on the Tradeweb NewMarkets Board included Luke Halestrap, the Head of Emerging Markets Interest Rates.

298. Barclays personnel on the Tradeweb Markets Board of Directors included Dexter Senft, another chief architect of the conspiracy who subsequently headed Morgan Stanley's Fixed Income e-Commerce division, and Andrew Challis, the Head of eFICC Distribution and Market Strategic Investments. Barclays personnel on the Tradeweb NewMarkets Board of Directors included Christopher Mosher.

299. Citi installed Sandeep Arora, the Chief Operating Officer, and Nicholas Brophy, the Head of Rates Trading in the Americas, on the boards of both Tradeweb Markets and Tradeweb NewMarkets.

300. Credit Suisse placed Sean Flynn, the Global Head of Investment Banking Strategy, and Timothy Blake, the U.S. Head of Interest Rates Products, on the boards of both Tradeweb Markets and Tradeweb NewMarkets.

¹¹³ See TRADEWEB, *Tradeweb Appoints New CEO* (Sept. 9, 2008), <http://www.tradeweb.com/News/News-Releases/Tradeweb-Appoints-New-CEO/>.

301. Deutsche Bank filled the boards of Tradeweb Markets and Tradeweb NewMarkets with Michele Faissola, the Head of Global Rates, and Stephen Wolff, the Head of Strategic Investments, Head of Fixed Income e-Commerce, and Head of Interest Rates Trading.

302. In addition to installing Vic Simone as Chairman, Goldman Sachs placed Brad Levy, another chief architect of the conspiracy alleged herein, as a board member of both Tradeweb Markets and Tradeweb NewMarkets. In 2011, Mr. Levy took over as Global Head of Goldman Sachs' PSI Group and, at the same time, became the Chairman of the Board of Directors of Tradeweb Markets. Goldman Sachs also installed Colin Corgan, a partner on its Rates Desk, on the boards of both Tradeweb Markets and Tradeweb NewMarkets.

303. JP Morgan named Simon Maisey to the Tradeweb Markets Board of Directors (and he joined Tradeweb as a Managing Director in 2014), and Christopher Paul Willcox, the Global Head of Rates Trading and the Head of Global Rates Strategic Investments, to the Tradeweb NewMarkets Board of Directors. In addition, Kemal Askar, JP Morgan's Head of Rates Trading in the United States, served on the boards of both Tradeweb Markets and Tradeweb NewMarkets.

304. When Dexter Senft joined Morgan Stanley as the Global Head of Fixed Income E-Commerce, Morgan Stanley installed him on the Tradeweb Markets Board of Directors. Morgan Stanley also installed David Moore, the Head of Global Rates, on the Tradeweb NewMarkets Board of Directors.

305. RBS placed Richard Volpe, the Global Head of Dollar Interest Rates, on the Tradeweb Markets Board of Directors, and Michelle Neal, the Global Head of Electronic Markets and co-head of FICC Prime Services, on the Tradeweb NewMarkets Board of Directors.

306. UBS personnel on the Tradeweb Markets Board of Directors included Joan Lavis, Global Head of Strategic Investments, and Paolo Croce, Head of European Rates. UBS placed Stuart Taylor, the Head Global eBusiness in Fixed Income, on the Tradeweb NewMarkets Board of Directors.

307. As noted, these board members include some of the primary architects of the conspiracy. They met regularly under the cover of Tradeweb's board and committees to plan how the Dealer Defendants could maintain control of the IRS market and make sure they were not disintermediated by anonymous all-to-all IRS trading platforms such as Javelin and TeraExchange.

308. In addition to routine conference calls, which often took place weekly, the Board met annually in Miami, Florida. The Dealer Defendants used these meetings to discuss and coordinate their strategy and to further their conspiracy to maintain a bifurcated IRS market.

309. The Dealer Defendants also control Tradeweb via its governance committees. Some examples of Tradeweb's governance committees are the "participation committees" that determine who can participate on Tradeweb's SEFs.¹¹⁴ Acting through these committees, the Dealer Defendants met and agreed to coordinate their conduct to ensure no threat to their collective dominance of the OTC market would succeed. Tradeweb kept the existence of these committees and the identities of their members largely hidden from the public.

310. The Dealer Defendants' personnel also regularly discussed market structure issues outside of the board or committee meetings. Chris D'Annibale, the Head of Interest Rate Swaps

¹¹⁴ See TRADEWEB, *DW SEF LLC: SEF Participation Committee Charter*, http://www.tradeweb.com/uploadedFiles/Tradeweb/Content/About_Us/Regulation/DW%20SEF%20Participation%20Committee%20Charter.pdf (last visited Dec. 9, 2016); TRADEWEB, *TW SEF LLC: SEF Participation Committee Charter*, http://www.tradeweb.com/uploadedFiles/Tradeweb/Content/About_Us/Regulation/TW%20SEF%20Participation%20Committee%20Charter.pdf (last visited Dec. 9, 2016).

for Tradeweb’s interdealer SEF, Dealerweb, regularly hosted dinners at his home on Long Island and at restaurants in New York City that were attended by representatives of the Dealer Defendants. At these dinners, the Dealer Defendants coordinated their strategies for the IRS market. In such formal and informal communications and meetings, the Dealer Defendants regularly discussed their plans for keeping the market bifurcated and preventing the transition to all-to-all trading.

311. In November 2010, Tradeweb NewMarkets LLC merged into Tradeweb Markets LLC in 2010, leaving Tradeweb Markets LLC as the surviving company. The Dealer Defendants continued to hold a controlling majority of seats on the Board of Directors of Tradeweb Markets LLC, giving them continuing control over the company.

4. Tradeweb Joined the Conspiracy and Continues to Participate

312. Tradeweb held itself out as an independent company, pursuing its own objectives in the market. In reality, however, Tradeweb has acted for the benefit of the Dealer Defendants since Project Fusion. William Hult, Tradeweb’s president, implicitly acknowledged as much, stating in June 2016: “We’ve had a long ownership relationship with many of the largest banks and the challenge for us *now* [*i.e.*, nearly nine years after the transaction] is to make that ownership work for us.”¹¹⁵

313. After taking control of Tradeweb’s IRS business, the Dealer Defendants, pressured Tradeweb to agree to take actions against its own individual interest. The independent (*i.e.*, non-bank) managers of Tradeweb recognized it would be in Tradeweb’s interest to launch an all-to-all anonymous electronic trading platform, and took steps to implement such a platform. But the Dealer Defendants quickly pressured them to change course. In turn, the Tradeweb

¹¹⁵ Smith, *supra* note 86.

managers agreed with the Dealer Defendants that Tradeweb would not implement pro-competitive changes to its trading platform.

314. The Dealer Defendants publicly tout Tradeweb as a modern, efficient trading platform that can provide “accurate pricing information” and “greater market transparency.”¹¹⁶ But these “benefits” are a sham, and serve only to placate the buy-side’s increasing demands for all-to-all trading. Pursuant to its agreement with the Dealer Defendants, Tradeweb merely put a new sheen on the OTC market structure — the buy side can trade on Tradeweb *only* via its dealer-to-customer RFQ platform, rather than all-to-all via an RFQ system or an order book, and did not allow buy-side customers to trade directly with one another.

315. Absent a conspiracy, it would not have been in Tradeweb’s independent interest to impose these restrictions. If Tradeweb had gone ahead with its plans to make available an efficient, all-to-all trading platform to all market participants, it would have enjoyed additional business and would have profited from the additional fees it would have earned.

316. Today, pursuant to its agreement with the Dealer Defendants, Tradeweb continues to play an active role in maintaining a two-tiered market structure. Tradeweb currently operates two different SEFs: Dealerweb, which is “designed exclusively for dealers” and allows anonymous trading, and Tradeweb SEF, which “is designed for non-dealer market participants and always discloses counterparty identities.”¹¹⁷ As Jon Williams, former Managing Director and

¹¹⁶ TRADEWEB, *Nine Global Dealers and Thomson Financial Form Premier Electronic Trading Venture Using TradeWeb* (Oct. 11, 2007), http://www.tradeweb.com/MediaCenterTwoColPage.aspx?Pageid=1124&id=1881&LangType=1033&&LangType=1033&ekfxmen_noscript=1&ekfxmense1=ef6f32368_6_84.

¹¹⁷ KELLEHER, ET AL., *supra* note 20, at 12.

Head of U.S. Institutional Market Operations at Tradeweb, acknowledged during a recent panel discussion at SEFCON: “we don’t have buy-side participants” on Dealerweb.

317. To trade on Dealerweb, Tradeweb charges \$50,000 per month — and requires that an entity pay for a minimum of a full year (\$600,000). But it only charges about \$100 per month to trade on Tradeweb SEF. It is “challenging to find a legitimate rationale for this enormous cost differential between these two platforms operated by the same company.”¹¹⁸ The real reason for this cost structure — which was instituted by the Dealer Defendants — is to “effectively establish[] and entrench[] a bifurcated dealer-to-dealer and dealer-to-customer marketplace” in furtherance of Defendants’ conspiracy.¹¹⁹

318. In fact, while Tradeweb SEF ostensibly offers an “order book,” it is effectively closed off to the buy side. The Dealer Defendants do not trade on the platform. They trade with each other on Dealerweb (or other IDBs) and limit trades with end users to the dealer-to-client RFQ. The Dealer Defendants also prohibit their clients from using the order book by punishing those who try to do so. As a result, this platform is inactive and seen by the buy side as inaccessible.

319. While Tradeweb could offer an all-to-all RFQ platform, it has limited its RFQ to facilitate dealer-to-client or dealer-to-dealer trading by allowing only dealers to respond to the quote requests submitted to the platform. Again, this is the result of Tradeweb’s agreement with the Dealer Defendants. It would not have been in Tradeweb’s self-interest to impose that limitation absent that agreement.

¹¹⁸ *Id.*

¹¹⁹ *Id.*

B. The Dealer Defendants Utilize Other Forums to Collude

320. While Tradeweb has been the principal forum through which the Dealer Defendants have colluded to coordinate their efforts to control the IRS market, the Dealer Defendants coordinate their conspiracy through other forums as well. One of these is ISDA. ISDA is nominally an industry trade association, but in reality, it served the interests of the Dealer Defendants.

321. From 2008 to the present, the Dealer Defendants controlled ISDA's Board of Directors and used those roles to discuss the IRS market and their conspiracy. The following employees of the Dealer Defendants held positions on the ISDA Board of Directors during the relevant period, and used ISDA to ensure that they all remain on the same page regarding their collective boycott of all-to-all electronic platforms for IRS trading: Stephen O'Connor (Morgan Stanley: Chairman), Ciaran O'Flynn (Morgan Stanley: Director), Keith Bailey (Barclays: Secretary), Diane Genova (JP Morgan: Treasurer), Biswarup Chatterjee (Citigroup: Director), Kieran Higgins (RBS: Director), Thibaut de Roux (HSBC: Director), Elie El Hayek (HSBC: Director), Christopher Murphy (UBS: Director), Will Roberts (Bank of America: Director), and Eraj Shirvani (Credit Suisse: Director).

322. In addition, the Dealer Defendants meet and collude under the auspices of meetings of the Board of Directors of the Futures Industry Association ("FIA"), or as part of various FIA "working groups." The following employees of the Dealer Defendants currently hold positions on the Board of Directors of FIA America (FIA's American division): M. Clark Hutchison (Deutsche Bank), Emily Portney (JP Morgan), Michael Dawley (head of Goldman Sachs' FCM), Jeffrey Jennings (Credit Suisse), Raymond Kahn (Barclays), Jerome Kemp (Citi), Najib Lamhaouar (HSBC), Edward Pia (UBS), and George Simonetti (Merrill Lynch, Pierce, Fenner & Smith).

323. ISDA and FIA often coordinate to create “working groups” that provide a forum for collusion. One such working group was devoted to the drafting of the “Cleared Derivatives Execution Agreement” (“CDEA”) — a standard form contract intended to govern the relationship between FCMs and their customers. The “CDEA Drafting Committee” was chaired by Maria Chiodi, a Director and In-House Counsel at Credit Suisse.

324. The CDEA Drafting Committee held numerous meetings throughout 2010 and 2011. One such meeting was held on April 8, 2011 at the offices of Credit Suisse in New York City. Jamie Cawley, Javelin’s former CEO, and Suellen Galish, Javelin’s General Counsel, learned of the meeting in advance, and requested an invitation because they were concerned that the CDEA Drafting Committee was being used to prevent or limit trading on all-to-all anonymous trading platforms.

325. At the meeting, Ms. Galish asked how the CDEA — which appeared to have been drafted solely for OTC transactions, and did not seem to cover IRS trades executed on a SEF — would work for trades executed on a SEF. Athanassios Diplas, then a Managing Director at Deutsche Bank and Co-Chair of ISDA’s Industry Governance Committee, immediately asked for Ms. Galish’s name and who she worked for, and refused to answer her question.

326. After the meeting, Ms. Chiodi told Mr. Cawley by email that it was inappropriate for any representatives of SEFs to attend future CDEA Drafting Committee meetings. Thereafter, Javelin was prevented from attending any further Drafting Committee meetings. Although the drafting of the CDEAs was purportedly an industry wide process, all-to-all SEFs including Javelin and TeraExchange were shut out of the process, though co-conspirators Tradeweb and ICAP had a voice through their conspiracy with the Dealer Defendants.

327. The Dealer Defendants also met and conspired through another IDB named “Tradition.” Tradition is the interdealer broker arm of Compagnie Financiere Tradition and one of the world’s largest IDBs in OTC financial and commodity related products. From 2013 to 2015, Tradition personnel hosted monthly meetings in New York with the collective heads of the Dealer Defendants’ IRS trading desks to discuss issues relating to SEFs. The Dealer Defendants used these meetings to coordinate their positions regarding the IRS market and to ensure none of them broke ranks to support electronic trading platforms that would threaten the Dealer Defendants’ control of the market.

C. The Dealer Defendants Prevented Interdealer Brokers From Opening All-to-All Trading Platforms to the Entire Market

1. The Dealer Defendants Punish Any IDBs that Take Steps Toward Allowing Buy-side Trading

328. In addition to taking control of Tradeweb and preventing it from offering more competitive trading, the Dealer Defendants conspired to prevent other market actors from opening all-to-all trading platforms. In particular, the Dealer Defendants identified IDBs as a potential platform for facilitating all-to-all trading, and moved decisively to quash that threat.

329. By the late 2000s, a number of IDBs were also well-positioned to allow buy-side customers to trade on all-to-all IRS trading platforms. Many already operated such platforms in the interdealer market, and opening access to others would not have imposed any additional technological burden. Since IDBs earned brokerage fees on each trade on their platforms, they had strong financial incentives to open their platforms to buy-side firms in order to expand their customer base. Great demand existed for this to happen. The Dealer Defendants, however, conspired to eliminate that threat as well.

330. The Dealer Defendants agreed to jointly penalize any IDBs that dared to consider opening their platforms to the buy side. In furtherance of this agreement, the Dealer Defendants

“threaten to withdraw liquidity from any trading platform that admits buy-side firms onto its [order book].”¹²⁰ As noted above, the Dealer Defendants refer to this practice as placing the IDB in the “penalty box” or “pulling the line” on the IDB.

331. GFI Group (“GFI”), for example, operates leading IDB platforms and attempted to implement anonymous trading on two separate occasions, with both immediately shut down by the Dealer Defendants. In 2009, an interdealer platform “run by GFI Group said it would allow anonymous trading,”¹²¹ a move the Dealer Defendants saw as the first step toward GFI allowing buy-side customers to trade on its platform. To prevent a shift to anonymity, the Dealer Defendants responded in unison with threats to pull their business off the platform.¹²² GFI promptly reversed course.

332. In 2014, GFI made a second attempt to bring an anonymous trading platform to market. Shortly thereafter, GFI “received heated phone calls from executives at Credit Suisse Group AG and J.P. Morgan Chase” over the introduction of trade anonymity.¹²³ In response to those calls, GFI switched trading to a name-disclosed basis, disappointing buy-side customers that had hoped to trade anonymously on the platform.

333. Anonymity is critical for the buy side in these situations because the Dealer Defendants similarly threaten any buy-side customer with the “penalty box” if they discover it

¹²⁰ Madigan, *supra* note 57.

¹²¹ Levinson, *supra* note 2.

¹²² See Kim Hunter, *Growing Pains*, Markit (Winter 2014), <http://content.markitcdn.com/corporate/Company/Files/MagazineEntireIssue?CMSID=1277525de02549adb7b422b9b34f641> (“The first [IDB] that goes anonymous is sending a signal that the buy side is becoming part of its platform. You’ll get wider spreads or even dealers withdrawing from that platform.”).

¹²³ Katy Burne, *CFTC to Propose Swaps Anonymity*, WALL ST. J. (Feb. 16, 2015), <http://www.wsj.com/articles/cftc-to-propose-swaps-anonymity-1424132424>.

has attempted to trade on an all-to-all platform, whether it is operated by an IDB, Tradeweb, Bloomberg, or independent SEFs such as Javelin and TeraExchange.¹²⁴ As described further above, the Dealer Defendants conspire to prevent anonymity in trading to catch transgressing end users. And when an end user is caught trading on a prohibited platform, the Dealer Defendants often refuse to trade with the investor in any venue. Because the Dealer Defendants are the primary market makers in the IRS market, such a boycott effectively prevents the investor from trading IRS for as long as it is in the “penalty box.” In some cases, the Dealer Defendants have even threatened a transgressing investor with withdrawal of key banking services. Such threats carry great weight and have had the intended deterrent effects.¹²⁵

334. As a result, IDBs did not open their platforms to the buy side. Tullett Prebon, for example, recently announced that it will soon open a platform on which buy-side customers can trade with one another (similar to its IDB platform), but will limit trading to asset classes in which dealers’ roles as market makers are already diminishing.¹²⁶ Mihiri Jayaweera, Tullett

¹²⁴ See Rennison, *supra* note 4 (quoting a U.S.-based hedge fund manager as stating: “In interest rate swaps, we have been given strong signals by our dealers that they would be annoyed if we, as a buy-side firm, showed up in the interdealer platforms.”).

¹²⁵ The Dealer Defendants even use the “penalty box” to prevent any *dealer* from taking steps that are not in their collective interests, even if it is in the dealer’s individual interest. For example, in 2003, Barclays attempted to launch a rudimentary, single-dealer electronic trading platform for IRS called “BARX” by partnering with Bloomberg. Other Dealer Defendants promptly refused to allow Barclays to participate in multi-dealer consortia, such as Tradeweb, for several years. BARX eventually ended its IRS business and became focused on foreign exchange trading. Even then, Dealer Defendants only let Barclays out of the “penalty box” when Barclays acquired the assets and personnel of the swaps business of Lehman Brothers, including Dexter Senft, who possessed deep connections with other Dealer Defendants. Mr. Senft used his connections to help Barclays ingratiate itself with the other Dealer Defendants, including by taking a stake in Tradeweb. Senft similarly used his connections to maintain Morgan Stanley’s involvement in the conspiracy after he joined that firm in 2010.

¹²⁶ Duncan Wood, *Brokers woo new clients, try not to upset old ones*, RISK (Sept. 9, 2016), <http://www.risk.net/risk-magazine/feature/2469861/brokers-woo-new-clients-try-not-to-upset-old-ones>.

Prebon's strategy head, has made clear that "[s]waps will be off limits" for the buy side, referring to IRS trading as "the territory of our dealer banks."¹²⁷

2. ICAP Agreed with the Dealer Defendants Not to Allow Buy-side Trading

335. In 2009, ICAP, agreed with the Dealer Defendants to prevent the buy side from accessing its platform as part of an agreed upon détente. In April 2009, Tradeweb (along with its Dealer Defendant investors) launched a trading platform for mortgage bonds called "Dealerweb".¹²⁸ This launch had a devastating impact on, ICAP, which had spent seven years building a mortgage-bond trading business that was transacting up to \$50 billion in daily volume. Following the Dealerweb launch, ICAP's mortgage-bond trading platform "lost 85 percent of its business over six weeks" as Dealerweb "basically walked away with the market."¹²⁹

336. In retaliation for Dealerweb capturing the mortgage bond market, ICAP threatened to launch an all-to-all platform for IRS. This threat was credible because ICAP was developing an electronic-trading platform for the European IDB IRS market called i-Swap, which ICAP could have launched as an all-to-all fully anonymous IRS trading platform in the United States and that could have included the buy-side.¹³⁰ Alternatively, ICAP could have chosen to allow buy-side customers to trade on its existing IDB platform. Either option threatened to collapse the bifurcated IRS market the Dealer Defendants wanted to maintain.

¹²⁷ *Id.*

¹²⁸ See Bryce Elder & Neil Hume, *Icap hurt by banks' platform*, FIN. TIMES (Apr. 21, 2009), <http://www.ft.com/intl/cms/s/0/a4bf29a2-2ead-11d1-b7d3-00144feabdc0.html#axzz419KBvtLz>.

¹²⁹ Matthew Leising & Jody Shenn, *ICAP Loses 85% of Mortgage Bond Trading to Dealerweb*, BLOOMBERG (Apr. 21, 2009).

¹³⁰ See Michael Mackenzie, *Rate swap traders wait for no man*, FIN. TIMES (Oct. 19, 2010), <http://www.ft.com/cms/s/0/9c6cf29c-dba5-11d1-a1df-00144feabdc0.html#axzz3p2IJ0933> (noting that i-Swap's European launch laid "the ground for an eventual assault on the US market").

337. In response to these mutual threats, ICAP communicated with representatives of the Dealer Defendants in the late spring and early summer of 2009. As a result of their discussions, ICAP and the Dealer Defendants agreed to a détente whereby the Dealer Defendants would not further expand Dealerweb into the IDB space in exchange for ICAP not establishing an all-to-all anonymous IRS trading platform.

338. The Dealer Defendants and ICAP have abided by that agreement to the present day. i-Swap’s European launch was very successful, with 30% of ICAP’s trade volumes moving onto the order book within months of its 2010 launch,¹³¹ With demand for all-to-all trading at a high, it was in ICAP’s self interest to bring the platform to the United States, but it elected not to do so for many years in furtherance of its agreement with the Dealer Defendants. Pursuant to that agreement, and against its own economic self-interest, ICAP did not open its i-Swap platform to the buy side in the U.S.¹³²

339. When ICAP did expand i-Swap to the United States in February 2013, it limited participation to dealers.¹³³ To circumvent provisions of Dodd-Frank that require trading platforms be open to all entities, ICAP publicly promoted that its platforms were open to everyone and even formally “registered” some buy-side customers as users. But, in actuality, ICAP’s brokers prevented the buy-side from trading on i-Swap by refusing to accept bids or

¹³¹ Masa Serdarevic, *Icap’s swap platform exceeds expectations*, FIN. TIMES (Mar. 31, 2011), <https://www.ft.com/content/98526a30-5b9c-11e0-b965-00144feab49a>.

¹³² See ICAP, *i-Swap*, <http://www.icap.com/what-we-do/electronic/i-swap.aspx> (last visited Dec. 7, 2016) (noting that, upon launch, i-Swap was not open to buy-side participants, that i-Swap “has a number of features that are specifically developed to reflect the trading strategies of the banks” and that, even today, i-Swap is not directly open to the buy side).

¹³³ See ICAP, *ICAP Launches i-Swap in the US* (Feb. 19, 2013), <http://newsroom.icap.com/icap-launches-i-swap-in-the-us>.

offers from buy-side customers for voice-brokered trades or for inclusion on the order book platform.¹³⁴

340. ICAP, in fact, restricted all of its U.S. IRS trading platforms to dealers alone. ICAP's restriction on the use of its platforms was the result of its agreement with the Dealer Defendants to maintain a bifurcated IRS market. Absent Defendants' conspiracy, it would have been in ICAP's interest to open its trading platforms to the buy side, effectively creating an all-to-all anonymous trading platform where the buy side could trade with more counterparties and without always going through a dealer.

341. To fulfill their end of the bargain, the Dealer Defendants have kept Dealerweb from expanding into IRS or any other market in any meaningful way. Tellingly, the Dealer Defendants formally opened Dealerweb for interdealer IRS trading but, as shown below, the Dealer Defendants only supply Dealerweb with a very low amount of trading volume — thereby making good on their end of the bargain while reminding ICAP and other IDBs that Dealerweb is an ever-present threat. The Dealer Defendants have also supported ICAP by directing their business to its platforms. In fact, certain Dealer Defendants even entered into written agreements that they would not support electronic IDB platforms other than ICAP, and would inform each other if they were approached by such a platform

342. ICAP also acted as a key coordinator of the Defendants' conspiracy through regular meetings with senior employees of the Dealer Defendants. For example, a senior ICAP executive regularly met and golfed with the head of Goldman Sachs' IRS business until November 2013, when the senior ICAP executive changed positions at ICAP. During these meetings, the senior ICAP executive and the head of Goldman Sachs' IRS business coordinated

¹³⁴ Smith, *supra* note 86 (ICAP's Laurent Paulhac acknowledging that the buy-side customers registered with ICAP do not actually trade on the platform).

their positions regarding ISDAfix, a key benchmark interest rate for a range of financial derivative instruments, and maintaining the status quo in the IRS market. During this time, the senior ICAP executive also met monthly with executives from the other Dealer Defendants to coordinate their positions regarding ISDAfix and maintaining the status quo in the IRS market.

D. The Dealer Defendants Erected Artificial Barriers to Buy-Side Clearing

343. The Dealer Defendants’ strategic investment groups have long identified the central clearing of OTC products as a first step toward electronic trading that would disintermediate the Dealer Defendants. As a 2010 JP Morgan report stated: “the main concern for the Investment Banking industry is that clearing is the first step leading to exchange/SEF trading for OTC products.”¹³⁵ The Dealer Defendants perceived clearinghouses “as representing the thin end of a wedge that would end with contracts being put on exchanges for trading.”¹³⁶

344. Accordingly, the Dealer Defendants have long sought to control the clearing infrastructure for the markets they dominate so they would be positioned to head off threats to their collective dominance. When it became clear in the early 2000s that IRS were ready to move to an electronic trading model, the Dealer Defendants jointly took control of the clearing infrastructure for IRS. As detailed above, they later used this control to prevent buy-side access to IRS clearing. From 2008 through 2013, Dealer Defendant personnel met and expressly discussed how to prevent or delay buy-side access to IRS clearing. These discussions occurred principally through Tradeweb and an entity called “OTCDerivNet,” which is discussed below.

¹³⁵ Kian Abouhossein & Delphine Lee, *Global Investment Banks: Investment Banking Wallet Outlook — All Eyes on Equity Derivatives*, J.P. Morgan Cazenove, GLOBAL EQUITY RESEARCH (Sept. 8, 2010) (emphasis added), <https://www.scribd.com/document/65324953/JPMorgan-Global-Investment-Banks-2010-09-08>.

¹³⁶ PETER NORMAN, *THE RISK CONTROLLERS: CENTRAL COUNTERPARTY CLEARING IN GLOBALISED FINANCIAL MARKETS* 302 (2011).

1. The Dealer Defendants Took Control of Clearing Infrastructure

345. LCH.Clearnet is an entity that has built clearinghouses for a variety of financial instruments for over 100 years. Indeed, LCH.Clearnet's history goes back to 1888, when it was known as the "London Clearing House." In September 1999, LCH.Clearnet launched a clearinghouse for IRS named "SwapClear."

346. The Dealer Defendants, through their strategic investment groups, resolved to take control of this entity to position themselves to control how clearing would develop in the IRS market. To do so, they formed a new entity called "OTCDerivNet." OTCDerivNet was founded in October 2000 by Bank of America, Barclays, Citi, Credit Suisse, Deutsche Bank, Goldman Sachs, Merrill Lynch, and Société Générale. BNP Paribas, Morgan Stanley, RBS, and UBS joined in 2001. JP Morgan and HSBC joined in 2009.

347. The Dealer Defendants held OTCDerivNet out publically as a venture intended to make the IRS market more efficient — for all participants. For example, they told the Federal Reserve Bank of New York that OTCDerivNet's purpose was to "support a secure, efficient and cost-effective post-trade dated environment for the mutual benefit of the (OTC) derivatives industry in a way which serves to mitigate operational, credit and settlement risks, whilst reducing support costs and regulatory capital requirements."¹³⁷

348. The reality, however, is that the Dealer Defendants formed OTCDerivNet principally as a vehicle to secure control of SwapClear. In fact, immediately after they created OTCDerivNet, the Dealer Defendants announced the company would "partner" with

¹³⁷ Ltr from the Dealer Defendants; Dresdner Kleinwort; Société Générale; Wachovia Bank, N.A.; ISDA; the Managed Funds Association; and the Asset Management Group of the Securities Industry and Financial Markets Association to Hon. Timothy Geithner, President of the Federal Reserve Bank of New York (Oct. 31, 2008), https://www.newyorkfed.org/medialibrary/media/newsevents/news/markets/2008/regulators_letter.pdf.

LCH.Clearnet, the nominal owner of SwapClear, for “the development of a secure, efficient and cost-effective post-trade dated environment for the benefit of the OTC derivative industry ”¹³⁸

349. This supposed “partnership” was wholly dominated by the Dealer Defendants. The Dealer Defendants, through OTCDerivNet, provided 100% of the funding of SwapClear, in return for a share of profits and governance control. Utilizing this control, the Dealer Defendants swiftly had SwapClear adopt various restrictions in its charter and rulebook that effectively limited clearing membership to dealers only. They imposed a requirement that any new member must put up \$5 billion in capital towards the clearinghouse – an amount they knew only large investment banks (*i.e.*, the Dealer Defendants) could afford. And they adopted a requirement that no new clearing member could join SwapClear without the unanimous approval of the existing members (*i.e.*, the Dealer Defendants).

2. *The Dealer Defendants Conspire to Prevent Other Clearing Entrants*

350. As the Dealer Defendants became more concerned about the growth of electronic trading of IRS, they used OTCDerivNet to shut down that growth.

351. In furtherance of this objective, the Dealer Defendants installed many of the same personnel on the board of OTCDerivNet Board of Directors that they simultaneously installed on the boards of the two Tradeweb entities they formed when they took control of Tradeweb in late 2007, as described above. These included Shea Wallon (Bank of America), Andrew Challis (Barclays), Timothy Blake (Credit Suisse), Dexter Senft (Morgan Stanley), and Michelle Neal (RBS). By serving on both boards, these individuals helped the Dealer Defendants maintain alignment across multiple levels of the IRS market. Other OTCDerivNet board members

¹³⁸ INTERNATIONAL MONETARY FUND, *United Kingdom: Observance by LCH CLEARNET LIMITED of the CPSS-IOSCO Recommendations for Central Counterparties Detailed Assessment of Observance* 40 (July 2011), <https://www.imf.org/external/pubs/ft/scr/2011/cr11235.pdf>.

included other bank personnel actively involved in the conspiracy, including William Hartnett, the Head of Strategic Investments for Citi.¹³⁹ These personnel had extensive discussions about buy-side clearing of IRS from 2008 through 2013, and they specifically discussed how the Dealer Defendants could jointly prevent or delay the buy side's ability to clear IRS trades.

352. The first major direct threat to the Dealer Defendants' control of the IRS clearing infrastructure came from the CME, a sophisticated entity with a long history of bringing clearing solutions (and exchanges) to a variety of financial markets.¹⁴⁰ CME was established in 1898. Over the next 100 years, CME built clearing and exchange solutions for numerous financial markets.

353. In the mid-2000s, CME was focused on providing clearing and trading solutions for swaps markets, including both IRS and CDS. In early 2008, CME announced plans to introduce a cleared IRS product in the U.S. called "CME Cleared Swaps," which offered "the first centrally-cleared interest rate swaps available to all over-the-counter (OTC) market participants."¹⁴¹ The CME offered clearing of OTC swaps executed on or submitted through its

¹³⁹ Other Board members of OTCDerivNet included Adam Battersby (Co-Head of Global Principal Investments at Bank of America), Amy Bradden (COO of Global Structured and Linear Rates at Bank of America), David Ornstein (COO of Markets and Head of Cross-Business Functions at Barclays), Ariane Athalie-Tersin (Head of Fixed Income Interest Rates Derivatives Trading at BNPP), Gavin Dixon (Fixed Income Business Manager and Derivatives Clearing at BNPP), David Elsley (Head of Rates at Citi), Stuart Bancroft (Head of Rates Trading at Citi), Gael De Boissard (Co-Head of Fixed Income at Credit Suisse), Trudy Ross (Deutsche Bank), Andrew Hudis (Goldman Sachs), Elie El Hayek (Global Head of Rates at HSBC), Neill Pattinson (Head of Global Rates and Head of Derivatives Clearing at HSBC), Andrew Powell (COO of Global Rates at JP Morgan), David Hudson (CFO of Global Markets at JP Morgan), Stephen O'Connor (Morgan Stanley), Simon Wilson (Deputy Head of EMEA Delta Trading, Global Head of Algorithmic Rates Trading at RBS), and David Leeming (Global Head of Product Management and Securities eCommerce at UBS).

¹⁴⁰ CME was established in 1898. Over the last 100 years, CME too has built clearing and exchange solutions for numerous financial markets. By around 2005, it was focused on providing clearing and trading solutions for swaps markets, including both IRS and CDS.

¹⁴¹ PR NEWswire, *Swapstream Announces 33 Participants for CME Swaps on Swapstream, the First Centrally Cleared Interest Rate Swap* (Feb. 4, 2008), <http://www.prnewswire.com/news->

trading platform Swapstream, as well as those executed bilaterally, through its OTC clearing solution “CME Clearing360.”¹⁴²

354. The Dealer Defendants viewed this as a serious threat because CME had built successful clearinghouses and exchanges for other asset classes, and it was clearly focused on bringing buy side clearing and trading of derivatives products, including both IRS and CDS. In fact, around the same time it announced its plans for an IRS platform, CME also announced it was partnering with Citadel to provide a CDS order book with central clearing for the buy side. As discussed further below, the Dealer Defendants paid nearly \$1.9 billion to settle claims in a prior lawsuit that they conspired to block that platform, known as “CMDX,” from successfully entering the market.

355. CME actively promoted its plans to make centrally cleared IRS available to *all* market participants and announced that 33 buy-side participants had committed to an “Early Adopter Program” for Swapstream.¹⁴³ The participants included mortgage banks along with more traditional buy-side customers such as asset managers, hedge funds, and proprietary trading firms.

356. The Dealer Defendants responded to this threat by boycotting Swapstream. Meeting through OTCDerivNet, the Dealer Defendants agreed to clear only *interdealer* IRS

releases/swapstream-announces-33-participants-for-cme-swaps-on-swapstream-the-first-centrally-cleared-interest-rate-swap-56784472.html.

¹⁴² BUSINESS WIRE, *GL TRADE and Swapstream Enter into Strategic Agreement to Support CME Cleared Swaps* (Sept. 3, 2008), <http://www.businesswire.com/news/home/20080903005862/en/GL-TRADE-Swapstream-Enter-Strategic-Agreement-Support>.

¹⁴³ PR NEWswire, *Swapstream Announces 33 Participants for CME Swaps on Swapstream, the First Centrally Cleared Interest Rate Swap* (Feb. 4, 2008), <http://www.prnewswire.com/news-releases/swapstream-announces-33-participants-for-cme-swaps-on-swapstream-the-first-centrally-cleared-interest-rate-swap-56784472.html>.

trades and only on *SwapClear* (the entity they controlled). Because the Dealer Defendants are a party to nearly every IRS trade, their collective refusal to clear IRS trades through Swapstream meant that effectively no trades were cleared through the platform, starving CME of clearing volumes and revenues. As a direct result of the Dealer Defendants' boycott, CME's clearing solution for IRS swiftly failed.

3. *The Dealer Defendants Maintain Artificial Barriers to IRS Clearing*

357. In the wake of the financial crisis, various governmental regulators and large institutions like Fannie Mae and Freddie Mac put considerable pressure on the Dealer Defendants to expand clearing in derivatives markets and to open up clearing to the buy side.¹⁴⁴ In response, the Dealer Defendants made changes at SwapClear that superficially purported to allow buy side access, while simultaneously adopting new rules that they knew would, as a practical matter, prevent meaningful buy side participation.

358. Specifically, beginning in late 2009, the Dealer Defendants amended SwapClear's rulebook to require that clearing members contribute extremely large amounts of capital to the clearinghouse's default (or "guaranty") fund. These requirements were significantly higher than actually necessary for the clearinghouse to fulfill its role. By design, only banks like the Dealer Defendants possessed sufficient capital reserves to make the required contributions, thereby ensuring only dealers could clear trades through the platform. As they acknowledged only in their internal discussions, the Dealer Defendants adopted these rules to prevent buy-side customers from joining SwapClear as clearing members.

¹⁴⁴ Peter Madigan, *Geithner calls for law change to force OTC derivatives clearing*, RISK (May 13, 2009), <http://www.risk.net/risk-magazine/news/1504635/geithner-calls-law-change-force-otc-derivatives-clearing>.

V. **ABSENT A CONSPIRACY, IRS MARKET PARTICIPANTS WOULD PREDOMINANTLY TRADE ON JAVELIN, TERAEXCHANGE, AND OTHER ALL-TO-ALL TRADING PLATFORMS**

A. **Relevant Market**

359. The relevant market is the market for IRS in the United States. IRS are, and are widely perceived by those in the industry to be, a unique financial product. The market for the purchase and sale of IRS in the United States is treated as a distinct financial market by market participants, government actors, and in economic literature.

360. Other derivative products are not substitutable for IRS. The rapid rise in IRS volume following their inception in the mid-1980s demonstrates that investors turned to IRS to secure the unique and critical function of protection against future movements in interest rates.

B. **The Dealer Defendants Have Substantial Market Power**

361. Currently, the Dealer Defendants continue to account for most IRS dealing, and they continue to earn extraordinary profits from their dealer-to-dealer OTC-like trading.

362. Each Dealer Defendant possesses a significant share of the IRS market, and they collectively dominate the market. Based on available market-share information, the Dealer Defendants collectively control at least 70% of the market. Indeed, in 2014, five of the ten Dealer Defendants collectively controlled over 50% of the IRS market by themselves while the remaining five Dealer Defendants controlled at least an additional 20% of the IRS market.¹⁴⁵

¹⁴⁵ In 2014, Bank of America was reported to control 12.6% of the IRS market, JP Morgan 11.4%, Deutsche Bank 9.5%, Citi 9.2%, and Barclays 8.2%. In 2012 Goldman Sachs was reported to control 6.9% of the IRS market, HSBC 5.0%, BNPP 4.9%, and Morgan Stanley 3.2%. The remaining Dealer Defendants — Credit Suisse, RBS, and UBS — collectively controlled over 10% of the IRS market in 2012. *See* GREENWICH ASSOCS., 2013 GLOBAL INTEREST RATE DERIVATIVES: DEALER RANKINGS & MARKET TRENDS REPORT — UNITED STATES 1 (2013).

363. The Dealer Defendants' market power is well-recognized. As Paul Rowady of the TABB Group stated: "Given the indispensable role of dealers in the OTC derivatives market, it is clear that few structural changes can occur without dealer support."¹⁴⁶ Mr. Rowady also stated that "[f]rankly, nothing happens in OTC derivatives without the major dealers blessing the moves, as they are counterparty to every trade."¹⁴⁷

364. The Dealer Defendants, however, dominate more broadly defined geographic markets as well, including the global market.

365. There are no adequate substitutes for IRS. While other financial instruments in the market replicate certain aspects of IRS, none afford investors the same benefits with the same flexibility as IRS.

366. For example, CME offers a swap futures product, but attempting to mimic an IRS trade with such products is often untenable or simply impossible because the available liquidity of swap futures is nowhere near that of IRS. IRS trading volume dwarfs swap futures: as a typical order of magnitude, the average daily volume of cleared OTC USD IRS is approximately \$200 billion notional, whereas that of swap futures is *one two-hundredths* the size at approximately \$1 billion. The difference in open interest is even more disproportionate, on the order of \$100 *trillion* in notional IRS interest outstanding versus a mere \$25 billion in swap futures. The relative dearth of swap futures liquidity compared with IRS liquidity is a major barrier for buy-side participants because the price impact of any large trade will be much worse in the swap futures market than it would be in the IRS market, if the trade could be done at all in the swap futures market. This means that, if an IRS trade could even theoretically be replicated

¹⁴⁶ Michael Mackenzie & Gillian Tett, *Markets: Frozen in time*, FIN. TIMES (June 15, 2010), <http://www.ft.com/intl/cms/s/0/bf3fd548-78b6-11df-a312-00144feabdc0.html#axzz3sFYwvyw0>.

¹⁴⁷ *Id.*

as a swap futures trade, the buy-side investor would have to pay much higher prices for the futures trade because it would be using up much more of the available supply.

367. Indeed, the Dealer Defendants have purposely contributed to the lack of liquidity in the swap futures market, by not directing liquidity into this market or supporting the swap futures market.

368. IRS are also not replicated by CME swap futures because the terms available on the resulting swap are much more restrictive than in IRS, limiting their utility for the buy side. For instance, CME futures are quarterly contracts available in only six tenors (2-, 5-, 7-, 10-, 20-, and 30-year), whereas IRS regularly trade in tenors available in whole-year increments from one up to 30 years or more. In addition, IRS can trade in fractions of year, such as a 3.5, 9.75, or 12.37-year. Similarly, while the start dates for the CME futures contracts are limited to just four dates a year (the third Wednesday of March, June, September, and December), IRS can start on any day the buy-side investor requires.

369. Because of this flexibility and deep liquidity, IRS can be used precisely and easily to hedge interest-rate fluctuations related to other financial instruments of significant value (by matching the start and end dates, tenor, and notional amount), whereas a CME futures contract cannot. Municipalities and corporations, accordingly, regularly enter into IRS related to floating-rate bonds they have issued; the IRS allow the entities to convert floating-rate exposure to fixed-rate exposure for the exact duration of the bonds. A futures contract would not match the start and end dates, thereby creating exposure to fluctuations in interest rates. Furthermore, a debt issuer would have to enter into numerous futures just to match the notional exposure on one bond issuance. As a result, municipalities, corporations, and other end users of IRS essentially make

no use of futures contracts. For all of these and still other reasons, CME swap futures are not an adequate substitute for IRS.¹⁴⁸

C. Defendants' Conspiracy Robbed Javelin and TeraExchange of Substantial Profits

370. As a result of the Dealer Defendants' joint boycott of Javelin, TeraExchange, and other anonymous all-to-all trading platforms, the SEFs that have succeeded are either controlled by the Dealer Defendants (Tradeweb), have explicitly entered into an unlawful agreement not to compete with the Dealer Defendants and breach the artificial market division (ICAP), or have recognized that the only way to avoid retaliation from the Dealer Defendants is to focus on providing a dealer-to-customer RFQ platform (Bloomberg).¹⁴⁹

371. Javelin, TeraExchange, and other SEFs that attempted to abolish name give-up have seen their customers threatened and their businesses hobbled by coordinated refusals to deal.¹⁵⁰ As described above, due to the Dealer Defendants' conspiracy *not a single SEF offering all-to-all anonymous trading currently does any meaningful business in the IRS market.*

¹⁴⁸ Similarly, a package (or "strip") of Eurodollar futures can be used to replicate certain aspects of an IRS, but building such a package is complicated and time-consuming for the buy side, and it produces a set of cash flows that may differ from an IRS. Eurodollar futures are cash-settled futures contracts with a final futures price based on three-month LIBOR at the expiration date. Building a strip of Eurodollar futures requires the purchase or sale of a series of futures maturing in successively deferred months. Thus, as with CME futures, an investor must make multiple purchases to build the equivalent of one swap — four Eurodollar futures must be purchased for each year of tenor of the IRS. And while an IRS locks in a single fixed payment rate for the life of the swap, each individual Eurodollar future in a strip comes with a different interest rate, meaning it produces different cash flows than an IRS. For these and other reasons, a strip of Eurodollar futures is also not an adequate IRS substitute for the buy side.

¹⁴⁹ While Bloomberg offers a nominal "order book," the platform sees little IRS activity because, among other things, the Dealer Defendants refuse to trade on the platform and buy-side firms fear Dealer Defendants retaliation if they do so.

¹⁵⁰ See also, e.g., Karen Brettell, *Banks' pressure stalls opening of U.S. derivatives trading platform*, REUTERS (Aug. 27, 2014), <http://www.reuters.com/article/2014/08/27/us-usa-derivatives-banks-idUSKBN0GR1Z320140827>.

372. But for Defendants' anticompetitive acts, the IRS market would have gravitated to Javelin, TeraExchange, and other all-to-all trading platforms, thereby generating immense profits for those all-to-all SEFs that, like Plaintiffs, stood ready, willing, and able to onboard customers and execute transactions.

373. In sum, if Plaintiffs had not been jointly boycotted by the Dealer Defendants there would have been a rapid migration of IRS onto Javelin and TeraExchange.

D. Absent Collective Action, It Would Have Been Economically Rational for Individual Defendants to Support Structural Changes

374. Absent a conspiracy to punish them for doing so, buy-side customers would have supported, and flocked to, all-to-all platforms like Javelin and TeraExchange that promised to keep their anonymity while also compressing bid/ask spreads due to increased competition and transparency.

375. Absent a conspiracy, it would have been in the individual interest of many different market participants — including IDBs, clearinghouses, and SEFs — to offer an all-to-all trading platform solutions to the buy-side. Instead, because of Defendants' conspiracy, Javelin, TeraExchange, and other SEFs that *have* tried to offer such platforms have been put out of business, while SEFs like Tradeweb that replicate the structure of the OTC market have remained successful. Without the Defendants' collusion, offerings such as those by Javelin and TeraExchange would have generated large new revenue streams through increased volume and market share.

376. Absent a conspiracy, it also would have been in the individual interest of many Dealer Defendants to support such a change as well. Absent a conspiracy, evolution to all-to-all trading would have been inevitable — it is the natural progression when financial products become, as most IRS have long been, highly standardized, high-volume products. This is

particularly true where, as here, Javelin, TeraExchange, and other solution providers were actively entering the market to make this happen in response to strong demand. Each Dealer Defendant, absent coordination, should have been looking out for its own self-interest — which would have been furthered by partnering with Javelin, TeraExchange, or some other all-to-all platform in order to “get in on the ground floor,” increasing its own market share and positioning itself for a fully competitive IRS market.

377. Absent a conspiracy, an individual Dealer Defendant could increase its own market share by providing a more favorable trading experience to customers in the form of fully anonymous order-book trading. Even leaving aside the potential to be an industry leader and gain first-mover advantage, each Dealer Defendant would have an independent interest in trading on the new platforms and providing clearing services, all of which could have been a profitable source of income. Because no individual Dealer Defendant could prevent all-to-all trading platforms from flourishing, the only way to overcome each Dealer Defendant’s individual economic self-interest in participation was to coordinate a united front that could prevent the emergence of all-to-all trading platforms.

378. An electronic all-to-all platform has not emerged. Not because IRS are not ready for all-to-all trading. Not because the buy-side does not want all-to-all trading. Not because Javelin, TeraExchange, and other solution providers were not ready, willing, and able to offer all-to-all trading. Instead, we have this world because the Dealer Defendants collectively blocked the market’s evolution. Only a conspiracy that assured each Dealer Defendant that all-to-all trading was not going to happen explains why no Dealer Defendant seized on the opportunity to profit by being the one in the lead when the inevitable change came, and why no other solution provider has stepped into the resulting void.

379. Defendants' agreement was a per se illegal agreement among horizontal competitors to collectively boycott Javelin and TeraExchange and thwart competition. The Dealer Defendants' collective refusals to deal with Javelin, TeraExchange, and other all-to-all trading platforms that would not play ball comprised a group boycott that is per se illegal under the antitrust laws.

E. Investigations and Litigation Concerning the Credit Default Swaps Market and ISDAfix Show a Pattern of Collusion Among the Dealer Defendants to Manipulate Various Aspects of the Financial System

380. This is not the first time the Dealer Defendants abused their collective influence over the market's infrastructure to obtain extraordinary profits with respect to a derivatives product. To the contrary, the Dealer Defendants' strategy here parallels their alleged misbehavior in the CDS market and in their manipulation of ISDAfix.

1. The Dealer Defendants' Misconduct in the Credit Default Swaps Market

381. The Dealer Defendants' misconduct in the CDS market has been the subject of two separate investigations by the United States Department of Justice ("DOJ") and the European Commission ("EC"). The DOJ and EC investigations were spurred by complaints by market participants that the Dealer Defendants, who were the major CDS dealers, were abusing their control of the market to limit price transparency and competition.¹⁵¹ In one widely reported email, for example, Samuel Cole, then-Chief Operating Officer of buy-side firm BlueMountain, lamented that banks, including many of the Dealer Defendants, were engaging in "liberal use of

¹⁵¹ See Liz Rappaport, Carrick Mollenkamp & Serena Ng, *U.S. Tightens Its Derivatives Vise*, WALL ST. J. (July 15, 2009), <http://www.wsj.com/articles/SB124756743503138067>.

disassembling and obfuscation” in order to retain their “oligopolistic dominance” of most major market structures in the credit markets.¹⁵²

382. The concerns expressed by the DOJ and EC are similar to present-day complaints about anticompetitive behavior in the IRS market. For example, the EC stated that “the banks acted collectively to shut out exchanges from the market because they feared that exchange trading would have reduced their revenues from acting as intermediaries in the OTC market.”¹⁵³ The EC believed that “the investment banks also sought to shut out exchanges . . . by coordinating the choice of their preferred clearing house.”¹⁵⁴

383. The striking similarities also carry over to the means by which exchange-like trading was blocked — *i.e.*, collective control over the system’s infrastructure, by way of group boycotts. For instance, CME backed a joint venture (with Citadel) known as CMDX, which was going to enable market participations to execute CDS trades through an order book.

384. In June 2008, CMDX was presented to the market. Members of the sell-side were offered equity in the venture, creating significant upside for those who would move first to support the migration to an exchange.

¹⁵² Serena Ng, *Friction on Swaps Response*, WALL ST. J. (June 3, 2009), <http://www.wsj.com/news/articles/SB124390301244674747>.

¹⁵³ EUROPEAN COMMISSION, *Antitrust: Commission sends statement of objections to 13 investment banks, ISDA and Markit in credit default swaps investigation* (July 1, 2013), http://europa.eu/rapid/press-release_IP-13-630_en.htm.

¹⁵⁴ *Id.*

385. CMDX was operationally ready by the fall of 2008¹⁵⁵ and was initially backed by several dealers.¹⁵⁶ CMDX ran into a brick wall, however, once the CDS dealers, including the Dealer Defendants, were able to circle the wagons. Further, as here, the dealers enjoyed the benefit of being on the boards of entities that controlled the system's infrastructure — in CDS, the relevant entities were Markit Group Ltd. ("Markit") and ISDA, whose boards were dominated by representatives of the dealer community.

386. The government investigations indicated that the dealers used their control over Markit and ISDA to prevent CMDX from launching with exchange-like features — instead insisting that a dealer stand on one side of every transaction, just like they did in the IRS market.¹⁵⁷

387. A series of private class actions were also filed against ISDA, Markit, and twelve CDS dealers alleging that they had conspired to boycott the exchange trading of CDS. The cases were consolidated into a single action. The defendants eventually agreed to pay over \$1.86 billion to settle the claims and also agreed to injunctive relief that would help clear the way for exchange trading of CDS.¹⁵⁸

388. It is telling that today IRS SEF operators and customers lodge similar criticisms against the Dealer Defendants as those that prompted the DOJ and EC to investigate the CDS

¹⁵⁵ Ciara Linnane & Karen Brettell, *NY Federal Reserve Pushes for Central CDS Counterparty*, REUTERS (Oct. 6, 2008), <http://www.reuters.com/article/2008/10/06/cds-regulation-idUSN0655208920081006>.

¹⁵⁶ *CME Sees Up to Six Dealers Backing Credit Swaps Platform*, DOW JONES NEWSWIRE (Dec. 23, 2008), <http://www.efinancialnews.com/story/2008-12-23/cme-sees-up-to-six-dealers-backing-credit-swaps-platform-1?ea9c8a2de0ee111045601ab04d673622>.

¹⁵⁷ EUROPEAN COMMISSION, *supra* note 153.

¹⁵⁸ See Katy Burne, *Big Banks Agree to Settle Swaps Lawsuit*, WALL ST. J. (Sept. 12, 2015), <http://www.wsj.com/articles/banks-wall-street-groups-agree-to-settle-credit-swaps-antitrust-case-1441988741>.

market, and spurred a series of class actions against the CDS defendants. While the markets at issue are different, today's complaints by SEF operators — that the Dealer Defendants work together as a cartel to squash outright or take control over any actual or potential competitors — are reminiscent of the complaints that prompted the CDS investigations in 2008 and 2009 and litigation in 2013.

389. As in the CDS market in 2008 and 2009, current IRS market participants lament how “the big banks control over half the liquidity in the market, giving them the power to decide which platforms survive, and which die.”¹⁵⁹ As a trader at one buy-side firm noted regarding the challenges that independent SEFs face, “[i]t’s been a really tough environment for the start-up SEFs, [because] the market is designed not to allow new entrants.”¹⁶⁰ Similar to how the major CDS dealers allegedly used their control over the CDS market to block new entrants and artificially inflate bid/ask spreads, current participants in the IRS market find themselves in an anticompetitive stranglehold, where promising new market developments are either entirely blocked, or taken over and neutralized, by the Dealer Defendants.

2. The Dealer Defendants’ Manipulation of ISDAfix

390. The Dealer Defendants have also allegedly manipulated ISDAfix, a key benchmark interest rate for a range of financial derivatives. Beginning in November 2012, the CFTC sent subpoenas to the world’s largest banks — including all or nearly all of the Dealer Defendants — and ICAP to determine whether the banks and ICAP were colluding to rig

¹⁵⁹ Levinson, *supra* note 2.

¹⁶⁰ See Mike Kentz, *Make or break time for SEFs*, INT’L FIN. REV. (May 2014), <http://www.ifre.com/make-or-break-time-for-sefs/21146200.fullarticle>.

ISDAfix.¹⁶¹ In September 2014, the CFTC reportedly told the U.S. Department of Justice that its investigation had found “evidence of criminal behavior” involving manipulation of ISDAfix.¹⁶²

391. A series of private class actions were subsequently filed against fourteen banks that dominate the market for interest-rate derivatives and set ISDAfix, including each of the Dealer Defendants, as well as ICAP. Similar to the allegations of the Complaint, the allegations of the ISDAfix class actions detailed how large banks shared information and worked together to manipulate the market for interest-rate derivatives for their own financial gain. Though all defendant banks continue to deny liability, seven of them, including Dealer Defendants Bank of America, Barclays, Citi, Credit Suisse, Deutsche Bank, JP Morgan, and RBS, have agreed both to pay a total of \$324 million to settle class action litigation, and to cooperate with counsel for the plaintiffs in further investigation of the manipulation of ISDAfix.¹⁶³

VI. EQUITABLE TOLLING OF THE STATUTE OF LIMITATIONS DUE TO DEFENDANTS’ CONCEALMENT OF THE CONSPIRACY

392. Javelin did not discover and could not have discovered through the exercise of reasonable due diligence that they were injured by Defendants’ conspiracy to boycott Javelin and other all-to-all IRS platforms, much less who caused that injury, until the fall of 2014, when Javelin learned that the Dealer Defendants and IDBs had agreed to continue name give-up in order to frighten the buy-side away from all-to-all trading

¹⁶¹ Matthew Leising, *CFTC Said to Subpoena ICAP Brokers, Dealers on Swap Prices*, BLOOMBERG (April 8, 2013), <http://www.bloomberg.com/news/articles/2013-04-08/cftc-said-to-probe-icap-treasure-island-brokers-on-swap-prices>.

¹⁶² Matthew Leising and Tom Schoenberg, *CFTC Said to Alert Justice Department of Criminal Rate Rigging*, BLOOMBERG (Sept. 9, 2014), <http://www.bloomberg.com/news/articles/2014-09-08/cftc-said-to-alert-justice-department-of-criminal-rate-rigging-i2z7ngfn>.

¹⁶³ Bob Van Voris, *Seven Banks to Pay \$324 Million to Resolve ISDAfix Claims*, BLOOMBERG (Sept. 9, 2014), <http://www.bloomberg.com/news/articles/2016-05-03/seven-banks-to-pay-324-million-to-resolve-isdafix-claims>.

393. TeraExchange did not discover and could not have discovered through the exercise of reasonable due diligence that they were injured by Defendants' conspiracy to boycott TeraExchange until at the earliest on June 14, 2014, when Dealer Defendants collectively refused to clear IRS trades executed on TeraExchange's IRS platform despite clearing such trades on other IRS trading platforms that did not offer meaningful all-to-all trading.

394. By its very nature, Defendants' conspiracy to boycott all-to-all trading of IRS and refuse to deal with any entity that could facilitate such trading was self-concealing. Defendants executed their conspiracy, in large part, through secret meetings and discussions. These meetings were often, although not exclusively, carefully held under the cover of meetings connected with ostensibly independent market actors, like Tradeweb or ISDA. Defendants used their positions in other industry consortia to meet regularly. These meetings provided a seemingly legitimate front for Defendants' conduct even though their discussions often had no valid connection to the legitimate work of the boards, committees, and other entities.

395. Defendants also met secretly at the homes of their senior executives and at restaurants in New York City. The details of these meetings were secret, as were the identities of the individuals attending the meetings. Defendants' internal communications and communications among each other were not public information, rendering impossible any ascertainment of the misconduct of individual Defendants or the fact of the conspiracy as a whole. Defendants also regularly met in person, and communicated regarding their conspiracy via telephone, email, instant messaging, and Bloomberg messaging. Plaintiffs had no way to access such communications.

396. The Dealer Defendants' boycott of all-to-all trading platforms was, by necessity, secretive — the boycotts would have been rendered ineffective, and likely broken down, if their existence was made public.

397. As a result of the self-concealing nature of the Defendants' collusive scheme, no reasonable person would have discovered Defendants' conspiracy to block the emergence of all-to-all trading of IRS before 2015 and later.

398. In addition, Defendants repeatedly made false and misleading statements about the reasons for their collusive actions, in a purposeful effort to cause the public to believe that there were legitimate reasons for the lack of market evolution, and they represented that their actions were beneficial to the market. Because of Defendants' affirmative efforts to mislead, Plaintiffs' continuing ignorance as to Defendants' conspiracy was not a result of a lack of due diligence.

399. Defendants' success in hiding their collusion was facilitated by their tremendous clout in the financial markets, above and beyond the IRS market. Market participants are acutely aware that they cannot afford to make enemies of the Dealer Defendants, and there is a great fear of retaliation. Market participants are well aware that, even if they were to make tentative suggestions that the Dealer Defendants might be engaging in anticompetitive behavior, such suggestions could be met with retaliation that could cause severe financial harm.

CAUSES OF ACTION

FIRST CAUSE OF ACTION **(Violation of Section 1 of the Sherman Act)**

400. Plaintiffs hereby incorporate each preceding and succeeding paragraph as though fully set forth herein.

401. As alleged above, Defendants and their co-conspirators entered into and engaged in a horizontal contract, combination, or conspiracy in restraint of trade to (1) allocate the dealer-to-customer IRS market and dealer-to-dealer IRS market between themselves, and (2) jointly boycott Javelin, TeraExchange, and other entities that would introduce competition on IRS bid/ask spreads in the United States in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1. Such contract, combination, or conspiracy constitutes a naked, per se violation of the federal antitrust laws and is, moreover, an unreasonable and unlawful restraint of trade that lacks any countervailing procompetitive rationale.

402. Defendants and their co-conspirators' contract, combination, agreement, understanding, or concerted action was without procompetitive justification and occurred within the flow of, and substantially affected, interstate commerce.

403. Defendants and their co-conspirators' conduct in boycotting Plaintiffs cannot be plausibly justified as being intended to enhance overall market efficiency. Among other things, Defendants' conduct leads to substantially wider bid/ask spreads than would occur through trading on an anonymous, all-to-all trading platforms like Javelin and TeraExchange.

404. As a direct and proximate result of Defendants' scheme and concrete acts undertaken in furtherance thereof, Javelin and TeraExchange have been injured and financially damaged in their respective businesses and properties, including by having lost capital, profits and goodwill, by incurring substantial and unnecessary expenses, and by being seriously weakened, and threatened with elimination, in amounts that are presently undetermined. Plaintiffs' damages are directly attributable to Defendants' illegal boycott of Plaintiffs' business and their allocation of the IRS market among themselves. Plaintiffs' injuries are of the type the

antitrust laws were designed to prevent, and flow from that which makes Defendants' conduct unlawful.

SECOND CAUSE OF ACTION
(Violation of the Donnelly Act)

405. Plaintiffs hereby incorporate each preceding and succeeding paragraph as though fully set forth herein.

406. Defendants' combination, conspiracy and arrangements alleged above, violate the Donnelly Act, N.Y. Gen. Bus. Law § 340, *et seq.*

407. As alleged above, Defendants and their co-conspirators entered into and engaged in a horizontal contract, combination, or conspiracy in restraint of trade to (1) allocate the dealer-to-customer IRS market and dealer-to-dealer IRS market between themselves, and (2) jointly boycott Javelin, TeraExchange, and other entities that would introduce competition on IRS bid/ask spreads in the market for IRS in the United States.

408. Defendants and their co-conspirators' conduct in boycotting Plaintiffs cannot be plausibly justified as being intended to enhance overall market efficiency. Among other things, Defendants' conduct leads to substantially wider bid/ask spreads than would occur through trading on an anonymous, all-to-all trading platform like Javelin and TeraExchange.

409. As a direct and proximate result of Defendants' scheme and concrete acts undertaken in furtherance thereof, Javelin and TeraExchange have been injured and financially damaged in their businesses and properties, including by having lost capital, profits and goodwill, by incurring substantial and unnecessary expenses, and by being seriously weakened, and threatened with elimination, in amounts that are presently undetermined. Plaintiffs' damages are directly attributable to Defendants' illegal boycott of Plaintiffs' business and their allocation

of the IRS market among themselves. Plaintiffs' injuries are of the type the antitrust laws were designed to prevent, and flow from that which makes Defendants' conduct unlawful.

410. There is a close nexus between the Defendants' conspiracy and injury to competition in New York, including the location of Plaintiffs and most of the Defendants in New York, and the regular trading of IRS by the Dealer Defendants' personnel located in New York.

THIRD CAUSE OF ACTION
(Unjust Enrichment Under New York Law)

411. Plaintiffs hereby incorporate each preceding and succeeding paragraph as though fully set forth herein.

412. Because of the acts of Defendants and their co-conspirators as alleged herein, Defendants have been unjustly enriched at the expense of Plaintiffs.

413. Plaintiffs seek restitution of the monies of which they were unfairly and improperly deprived, as described herein.

FOURTH CAUSE OF ACTION
(Tortious Interference with Business Relations Under New York Law)

414. Plaintiffs hereby incorporate each preceding and succeeding paragraph as though fully set forth herein.

415. Because of the acts of Defendants and their co-conspirators as alleged herein, Defendants injured prospective business relations Plaintiffs had with their customers.

416. Plaintiffs seeks restitution of the monies of which they were unfairly and improperly deprived, as described herein.

PRAYER FOR RELIEF

417. WHEREFORE, Plaintiffs, respectfully request that the Court:

- a. Find Defendants jointly and severally liable for the damages incurred by Plaintiffs;

- b. Award Plaintiffs treble damages;
- c. Award reasonable attorneys' fees and costs;
- d. Award all available pre-judgment and post-judgment interest, to the fullest extent available under law or equity from the date of service of the initial complaint in this action;
- e. Decree that Defendants and their co-conspirators have unlawfully conspired to boycott Javelin in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1 and the Donnelly Act, N.Y. Gen. Bus. Law § 340;
- f. Decree that Defendants and their co-conspirators have unlawfully conspired to boycott TeraExchange in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1 and the Donnelly Act, N.Y. Gen. Bus. Law § 340;
- g. Decree that Defendants have been unjustly enriched by their wrongful conduct and award restitution to Plaintiffs;
- h. Decree that Defendants have tortuously interfered with Plaintiffs' prospective business relations with its customers;
- i. Permanently enjoin Defendants from continuing their unlawful conduct, which has prevented competition from entering the IRS market, a market valuable to not only Plaintiffs but also to the nation's financial system and broader economy for the risk management and liquidity benefits it can provide; and
- j. Order such other, further, and general relief as is just and proper.

JURY DEMAND

Pursuant to Federal Rule of Civil Procedure 38, Plaintiffs demand a trial by jury on all issues so triable.

Dated: December 9, 2016

Respectfully submitted,

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